

SELF STUDY REPORT

Submitted to

**NATIONAL ASSESSMENT AND ACCREDITATION COUNCIL
(NAAC)**

An Autonomous Institution of the University Grants Commission
P.O. Box No.1075, Nagarbhavi, Bangalore - 560072

by



ESTD 2002

Jyothi Engineering College

Approved by AICTE & Affiliated to APJ Abdul Kalam Technological University

A CENTRE OF EXCELLENCE IN SCIENCE & TECHNOLOGY BY THE CATHOLIC ARCHDIOCESE OF TRICHUR

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PART - A & B

PREFACE

&

PROFILE

PART A

PREFACE

In recent years, the advancement of scientific and technological development is astounding. In this context, it is highly required to produce Scientists and Engineers of eminence. They craft concepts, blend them with the existing ones with the aid of technology, and turn them into products and services, for improving the living conditions of the society. Thus, they meet the needs of the world while they change it too. For this, it requires coordination of innumerable aspects which have to be taught in a diversified manner. This needs an education system paving way for to cope up with the challenges and solve problems which require ideas, skills and techniques. The development can transform the society as well as revitalise the individuals.

The Catholic Archdiocese of Thrissur, inspired by this agenda as well as to extend universal education, founded Jyothi Engineering College in 2002 under the Thrissur Educational Trust as a Christian minority institution. The Archdiocese with an excellent track record of a century and a quarter in the areas of Education, Health Care and Social Service has played a vital role in these areas. Out of these, Education was the prime concern. Started with St. Thomas' College High School in 1889, the ministry had a nonstop race and today it has a number of establishments under its umbrella including 6 aided and 17 unaided colleges and many professional institutions in addition to a large number of schools of various levels. St. Thomas' College, Maha Jubilee Training College and Jubilee Mission Medical College and Nursing College are prominent among them. In the field of technical education, the Diocese has made its early contributions by taking over Alagappa Polytechnic College, Thrissur – India's first aided Polytechnic College, established by Sri. Alagappa Chettiar, a great Industrialist and Philanthropist and establishing a number of Technical Training Institutes.

The foundation stone was blessed by H. G. Cardinal Mar Varkey Vithayathil on 1st May 2001, and laid by H. G. Mar Jacob Thoomkuzhy, then Archbishop of Thrissur on 11th May 2001. His grace blessed the college on 14th June 2002, and the classes started on 23rd September 2002.



H. G. Cardinal Mar Varkey Vithayathil
Blessing the Foundation Stone

Shri A. K. Antony, then Chief Minister of Kerala inaugurated the College on 12th October 2002. The College started functioning with 4 disciplines, namely Electronics and Communication, Electrical and Electronics, Computer Science & Engineering and Information Technology. The Departments of Mechanical Engineering and Applied Electronics and Instrumentation were added in 2004 and 2006, respectively. Additional batches in Mechanical Engineering and a new batch in Civil Engineering were started in 2012. Additional batches in Electronics and Communication and Computer Science & Engineering commenced in 2013. M. Tech. programmes in Electrical and Electronics and Computer Science & Engineering were also started in 2012 and 2013, respectively.



Shri. A K Antony, Former Chief Minister of Kerala
Inaugrating the College

During the last 13 years since its blossoming, this diocesan educational institution, has accomplished the aspirations as per the credentials below. This institution has deemed to have redeemed substantially its pledge to the society to train the young with a robust ethical ethos to be leaders of engineering profession and contributors to every segment of the Indian society.

The college has separate hostels for men and women. **Santhome** Hostel for men and **Marian** Hostel for women were unveiled by Shri. K. V. Thomas, then Minister for Excise and Fisheries, Govt. of Kerala on 25th March 2004.



Shri. K V Thomas, Former Minister for Excise and Fisheries,
Govt. of Kerala inaugurating the Hostels

Shri. Oommen Chandy, Chief Minister, Govt. of Kerala inaugurated the Administrative block on 18th October 2005 and Decennial Celebrations of the college on 15th November 2011. Shri K. Radhakrishnan, then Honorable Speaker of Kerala Legislative Assembly opened the western block on 22nd December 2006.



Shri. Oommen Chandy, Chief Minister, Govt. of Kerala
inaugurating the Administrative Block



Shri. Oommen Chandy, Chief Minister, Govt. of Kerala
inaugurating the Decennial Celebrations



Shri. K Radhakrishnan, Former Speaker, Kerala Legislative
Assembly inaugurating the Western Academic Block

Jyothi was also blessed with the visit of Hon'ble former Priminister of India, Dr. Manmaohan Singh on 12th September 2012.



PRIMEMINISTER INAUGURATE THE NAKSHATHRAVANAM IN CONNECTION WITH THE DECENNIAL CELEBRATIONS- 12-09-2012

Jyothi campus is spread over an area of 36.717 acres at Jyothi Hills, Cheruthuruthy, very close to Kerala Kalamandalam, the cultural University of Kerala, just 500 meter from Vallathol Nagar Railway station, 4 km from Shornur Railway junction and 28 km from Thrissur. It is also easily accessible from three airports, Cochin, Calicut and Coimbatore at a distance of 75-80 kms. The central campus stretches out end to end either by landscaped expanses dotted by thick colorful flowery patches or breezy tree-shaded meadows reminding one of the pastures. Jyothi's high rising endless concrete structures wed the strength and sophistication of the contemporary with the immaculate serenity and mellowed loveliness of rustic simplicity - a unique topographic amalgam dappled with lawns, courtyards, walkways, multi-colored umbrella-study-shelters and flower laden arches. For a lyricist, this is "the singular arcadia among the State's cluttered campuses".

The college is affiliated to Calicut University from 2002 and when APJ Abdul Kalam Technological University came into existence in 2015, the college is affiliated to it since 2015. The students in the in the S3 to S8 will continue their studies under Calicut University while those admitted in 2015 in S1 and S2 will be under APJ Abdul Kalam Technological University. The college stands as the 4th Best Engineering College in Kerala by the Directorate of Technical Education (DTE), Thiruvananthapuram, Kerala and holds 3rd place in Calicut University among all Engineering Colleges affiliated to it. The students of this college have secured 20 ranks in various disciplines. The college has been awarded Academic Excellence Award twice consecutively in 2013 & 2014 by the University of Calicut. The college is ISO 9001:2008 certified and Eco Friendly Campus with Wi-Fi connectivity.

The college has 200 plus skilled staff and faculty with diverse backgrounds. "Reading makes a man wise" goes a saying. In tune with this, the college library enhances learning through its collection of

over 39,000 books and subscribes to 85 technical and scientific print and e-journals and NPTEL. The Library has 517 E-Resources. In addition to this, an audio-visual library is installed containing colour T.V 's and VCR's with video tapes on various subjects. Field-based learning like Current Affairs, Reference services, Online searching are provided. Upgradation plans are also in store like creating a computerized database in the fields of Science, Engineering, Technology and Management. Bringing the wealth of knowledge from the comfort of the library to the masses is another venture by its participation in the local area computerized network systems to share information resources.

The Computer Science & Engineering, Electrical and Electronics, Electronics and Communication and Mechanical Engineering is accredited by the Institution of Engineers (India) and approved IETI Exam Centre. Jyothi is an Institutional member of Indian Society for Technical Educational, New Delhi (ISTE), Institution of Engineers (India), Kolkata and Computer Society of India (CSI) and ICT Academy OF Kerala, Indian Concrete Institute (ICI), Chennai and Institute of Electronics and Telecommunication Engineers (IETE).

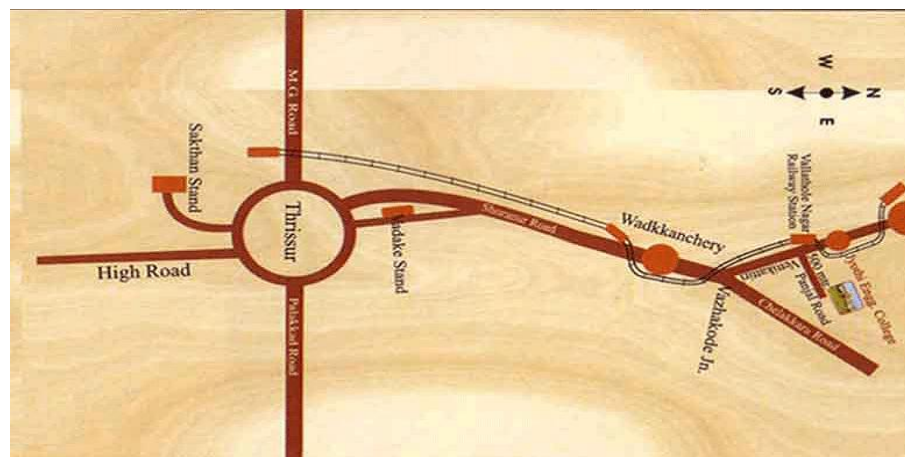
This institution views NAAC Accreditation as a national level authentic peer reviewed educational quality benchmark. An institution endlessly in quest of quality, Jyothi volunteers to undergo the accreditation process periodically in order to ascertain that it meets the requisite national criteria in engineering education. This however, is the first accreditation experience. By seeking accreditation, the first cycle one, it is expected to empower our stakeholders in the following ways:

1. Students can make informed decisions on choosing an institution of guaranteed quality
2. Parents get assurance of quality from a national body constituted for that purpose
3. The institution can focus on its quality enhancement and sustenance endeavors based on NAAC's assessment findings
4. Employers/industry can well be assured of student quality when they need freshers, and
5. Universities can place an additional value on accredited UG programs compared to the non-accredited ones in PG admissions

The breadth of engineering education in Jyothi - from the traditional Civil Engineering to the Electronics and Communication engineering - has made it the most sought-after engineering institution in the State. As a consecutive whole, Jyothi helps build many a bright and ambitious career. Hence, **Walk in with dreams and Walk out with reality!**

Road Map to Jyothi Engineering College

Jyothi Engineering College, Cheruthuruthy (JECC) is a state-of-the-art Engineering College, conforming to international standards. This college is approved by AICTE, vide order South-West Region /F.N.O.06/06/KER/ENGG/2002/92 dated 27-5-2002 and affiliated to University of Calicut vide order No.GA 1/D4/6409/2001 dated 10-2-2003.



The college visualises 2 fold increase in student intake with more UG Courses, related PG Programmes and advanced research in high emerging fields. This will enable the students enrolled in Jyothi to fulfill their ambitions of gaining a research degree in any of the Engineering Disciplines. From the present status of a conventional Engineering College, Jyothi hopes to make a quantum leap into that of an advanced technology and research centre in collaboration with

international institutions of repute, eventually transforming itself into a full fledged deemed technological university.

With a far-sighted management, a team of dedicated faculty and a set of devoted staff and with the highly sophisticated infrastructural and erudite instructional facilities in a placid and serene rural environment, Jyothi has emerged as a Model among the self-financing colleges in Kerala.

PART B
PROFILE OF THE COLLEGE

Profile of the Affiliated/Constituent College :

1. Name and Address of the college:

Name : Jyothi Engineering College
Address : Jyothi Hills, Vettikattiri P. O
City : Cheruthuruthy - 679531
District : Thrissur
Website : www.jecc.ac.in

2. For communication:

Designation	Name	Telephone With STD code	Mobile Number	Fax Number	E-mail ID
Principal	Dr. K. K. Babu	91- 4884 274198, 274423, 274777, 274877, 274878, 274879, 259255, 259000	+91- 9447027933	04884- 274777	principal@ jecc.ac.in

3. Status of the Institution:

Affiliated College
Constituent College
Any other (specify)

4. Type of Institution:

a. By Gender
i. For Men
ii. For women
iii Co-education

b. By shift

i. Regular

ii Day

iii Evening

5. Is it a recognized Minority institution?

Yes

No

If yes, specify the Minority status (Religious/Linguistic/any other) and provide documentary evidence.

6. Source of funding:

Government

Grant-in-aid

Self- financing

Any other

7. a. Date of establishment of the College: 06-06-2002

b. University to which the College is affiliated/ or which governs the College (if it is a constituent College)

University of Calicut

APJ Abdul Kalam Technological University

(Copy of the grant/renewal of permanent affiliation from the academic year 2013-14 by the University of Calicut is enclosed as Annexure I)

c. Details of UGC Recognition: NA

Under Section	Date. Month & Year (dd-mm-vvyy)	Remarks (if any)

d. Details of recognition/ approval by statutory/ regulator bodies other than UGC (AICTE, NUTF, MCI, DCI, PC1, RC] etc

Under Section/clause	Recognition/ Approval details of Institution/departments/program mes	Date, Month & Year (dd-mm-yyyy)	Validity

F No. 06/06/ KER/ ENGG/ 2002/ 92 of AICTE No.GA1/D4/ 6409/2001 of Calicut University	B. Tech: Electrical Engineering Engineering Electronics & Communi-cation Engineering Computer Science and Engineering Information and Technology	27-05-2002 10.02.2003	Provisional affiliation for 2002-03
S No. 27 of AICTE No.GA1/D4/ 6409/2001 of Calicut University	B. Tech: Electrical Engineering Electronics & Communication Engineering Computer Science and Engineering Information and Technology	30-04-2003 10.02.2003	Continuation of Provisional affiliation for 2003-04
F No. 06/06/KER/ ENGG / 2002/92 of AICTE No.GA1/D2/ 5362/03 of Calicut University	B. Tech: Electrical Engineering Electronics & Communication Engineering Computer Science and Engineering Information and Technology	26-06-2004 01-11-2004	Extension of approval for 2004-05
F No. 06/06/KER/ ENGG/ 2002/92 of AICTE No. GA1 / D2/ 5362/ 03 of Calicut University	B.Tech: Electrical Engineering Electronics & Communication Engineering Computer Science and Engineering Information Technology Mechanical Engineering Applied Electronics & Instrumentation Engineering	01-07-2005 10-05-2006	Continuation of Provisional affiliation for 2005-06
F No. 06/06/KER/ ENGG/ 2002/92 of AICTE	B. Tech. Electrical and Electronics Engineering Electronics & Communication Engineering Information Technology Computer Science and Engineering Mechanical Engineering Applied Electronics & Instrumentation Engineering	26-08-2005	Name change of branches
F No. 06/06/KER/ ENGG/ 2002/92 of AICTE	B. Tech. Electrical and Electronics Engineering Electronics & Communication Engineering	10-05-2006 and 20-06-2006	Continuation of Provisional affiliation for 2006-07

No.GA1/D2/ 5362/03 Vol 2 of Calicut University	Information Technology Computer Science and Engineering Mechanical Engineering Applied Electronics & Instrumentation Engineering	29-08-2011	
F No. 06/06/KER/ ENGG/ 2002/92 of AICTE No.GA1/D2/ 5362/03 Vol 2 of Calicut University	B. Tech. Electrical and Electronics Engineering Electronics & Communication Engineering Information Technology Computer Science and Engineering Computer Science and Engineering Mechanical Engineering Applied Electronics & Instrumentation Engineering	11-05-2007 02-05-2008 29-08-2011	Continuation of Provisional affiliation for 2007-08
F No. 06/06/KER/ ENGG/ 2002/92 of AICTE No.GA1/D4/5362/200 3 Vol 2 of Calicut University	Electrical and Electronics Engineering Electronics & Communication Engineering Information Technology Computer Science and Engineering Mechanical Engineering Applied Electronics & Instrumentation Engineering	02-05-2008 and Nil 29-08-2011	Continuation of Provisional affiliation for 2008-09
F No. South –West/1- 5837292/2010/EOA of AICTE No.GA1/D4/5362/200 3 Vol 2 of Calicut University	B. Tech. Electrical and Electronics Engineering Electronics & Communication Engineering Information Technology Computer Science and Engineering Computer Science and Engineering Engineering Applied Electronics & Instrumentation Engineering	23-08-2010 04.07.2012	Continuation of Provisional affiliation for 2010-11
F No. South –West/1- 396879512/2011/EO A of AICTE	B. Tech. Electrical and Electronics Engineering Electronics & Communication Engineering Information Technology	01-09-2011	Continuation of Provisional affiliation for 2011-12

No.GA1/D4/5362/2003 Vol 2 of Calicut University	Computer Science and Engineering Mechanical Engineering Applied Electronics & Instrumentation Engineering M. Tech. Power Electronics	22-3-2012	Affiliation for M. Tech programme in Power Electronics
F No. South –West/1-688304431/2012/EO A of AICTE No.GA1/D4/5362/2003 Vol 2 of Calicut University	B. Tech. Electrical and Electronics Engineering Electronics & Communication Engineering Information Technology Computer Science and Engineering Mechanical Engineering Applied Electronics & Instrumentation Engineering Civil Engineering M. Tech. Power Electronics Computer Science and Engineering Manufacturing Systems	10-05-2012 10-05-2012, 06-09-2012 and 04-07-2012	Continuation of Provisional affiliation for 2012-13 and increase in the intake of students in Mechanical Engineering and affiliation to B. Tech. B. Tech. in Civil Engineering Affiliation for M. Tech programme in Computer Science and Engineering Manufacturing Systems
U.No. 1039/2013/CU of Calicut University	B.Tech. Information Technology Applied Electronics & Instrumentation	02-04-2013	Disaffiliation of B.Tech
F No. South –West/1-1413163745/2013/EO A of AICTE	B. Tech. Electrical and Electronics Engineering Electronics & Communication Engineering Computer Science and Engineering Mechanical Engineering Engineering	30-04-2013	Continuation of Provisional affiliation for 2013-14 Increase of seats in

No. 5384/CDC-D4/2013 of Calicut University	Civil Engineering M. Tech. Power Electronics Computer Science and Engineering Manufacturing Systems	15-05-2013	B.Tech. Mechanical Engineering
F No. South –West/1-2020017213/2014/EO A of AICTE U.O. 8185/2014/Admn of Calicut University No. 5384/CDC – A1/2015/CU of Calicut University U.O. 6697/2015/Admn of Calicut University	B. Tech. Electrical and Electronics Engineering Electronics & Communication Engineering Computer Science and Engineering Mechanical Engineering Civil Engineering M. Tech. Power Electronics Computer Science and Engineering	04-06-2014 19-08-2014 26-03-2015 27-06-2015	Continuation of Provisional affiliation for 2014-15
F No. South –West/1-22460104369/2015/EOA of AICTE U.O. 6697/2015/Admn of Calicut University	B.Tech: Electrical & Electronics Engineering Electronics & Communication Engineering Computer Science and Engineering Mechanical Engineering Civil Engineering M.Tech: Computer Science and Engineering Power Electronics	07.04.2015 27-06-2015	Continuation of Provisional affiliation for 2015-16
G.O. (Ms). No: 93/2015/H.Edn Dt: 11-0.-2015 of Govt. of Kerala	B.Tech: Electrical & Electronics Engineering Electronics & Communication Engineering		Disaffiliation of Engineering Colleges in the State of

	Computer Science and Engineering Mechanical Engineering Civil Engineering M.Tech: Computer Science and Engineering Power Electronics		Kerala
No: KTU/A/593/2015 Dt: 15-05-2015 of Kerala Technological University	B.Tech: Electrical & Electronics Engineering Electronics & Communication Engineering Computer Science and Engineering Mechanical Engineering Civil Engineering M.Tech: Computer Science and Engineering Power Electronics		Provisional affiliation of Technical Institutions for the Academic year 2015-16 under Kerala Technological University

(Copies of the AICTE, Calicut University and APJ Abdul Kalam Technological University approval letters are enclosed as Annexure II)

Increase in intake in the Existing Course (affiliation sanction from University of Calicut not received)

B.Tech: Civil Engineering

New course (affiliation/ sanction from University of Calicut not received)

M.Tech: VSLI Design and Embedded Systems

M.Tech: Communication Engineering and Signal Processing

8. Does the affiliating university Act provide for conferment of autonomy (as recognized by the UGC), on its affiliated colleges? Quality Policy

Yes

No

If yes, has the College applied for availing the autonomous status?

Yes No

9. Is the college recognized

a. by UGC as a College with Potential for Excellence (CPE)?

Yes No

If yes, date of recognition: (dd/mm/yyyy)

b. for its performance by any other governmental agency?

Yes No

If yes, Name of the agency date of recognition(dd/mm/yyyy)

10. Location of the campus and area in sq.mts:

Location *	Rural
Campus area in sq. mts.	1, 44,555 sq.m. Rural area
Built up area in sq. mts.	35,621 sq.m.

(* Urban, Semi-urban, Rural, Tribal, Hilly Area, Any others specify)

11. Facilities available on the campus (Tick the available facility and provide numbers or other details at appropriate places) or in case the institute has an agreement with other agencies in using any of the listed facilities provide information on the facilities covered under the agreement.

Auditorium/seminar complex : The college has an auditorium with infrastructural facilities and two seminar complexes in addition to the Departmental seminar halls.

Sports facilities

- play ground : Play ground available with facilities
- swimming pool : Nil
- gymnasium : provided in the hostel, separately for boys and girls.

- Hostel

Boys' hostel :

Number of hostels : 1

Number of inmates : 243

Facilities (mention available facilities) :
1. Spacious rooms with common bathrooms, Table, Chair, Bed & Fan
2. Common room with facilities like TV
3. Reading room with facilities of News Papers, Magazines etc.

Girls' hostel :

Number of hostels : 1

Number of inmates : 222

Facilities (mention available facilities) :
1. Spacious rooms with common bathrooms, Table, Chair, Bed & Fan,
2. Common room with facilities like TV and
3. Reading room with facilities of News Papers, Magazines etc.

Working women's hostel : NIL

Number of inmates ----

Facilities (mention available facilities)

Residential facilities for

teaching and non-teaching staff : In the students hostel, staff quarters are earmarked
(give numbers available cadre wise)

1. Cafeteria : Canteen - 1No., Snacks bar – 2 Nos.

2. Health centre :

First aid : Provided

- Inpatient, Outpatient : Separate sick rooms for boys and girls
- Emergency care facility : The college has a tie up with a multi speciality Hospital (Jeevodaya Hospital, Chelakkara) situated within 8 km, Jubilee Mission Medical College & Research Institute, Thrissur and Trichur Institute of Mental Health and Neuro Sciences, Thrissur. Copies of the MoU attached.
- Ambulance : College transportation is available at all times
- Health centre staff :
- Qualified doctor Full time Yes Part-time Nil
- Qualified Nurse Full time Yes Part-time Nil
3. Facilities like
- Banking : Extension counter of Federal bank Ltd.
- Post office : Situated within 500 mts.
- Book shops : The college runs a store
4. Transport facilities to cater to needs of students and staff : A fleet of 20 buses provided for students and the staff and one van for Head of the departments and Senior staff
5. Animal house : Nil
6. Biological waste disposal : Provided in the campus
7. Generator or other facility for management/ regulation of electricity and voltage : a. Two stand by Generators of 250 KVA and 62.5 KVA Generators as back up Power supply
- b. To tap Non-Conventional EnergySource, a 50 KW Solar Power Plant is installed
8. Solid waste management facility : Yes
9. Waste water management : Nil
10. Water harvesting : Yes

12. Details of programmes offered by the college (Give data for current academic year)

Sl No	Program level	Name of the Program/ Course	Duration	Entry qualification	Sanctioned/ approved student strength	No. of students admitted
1	Under graduate	Civil Engineering	4 yrs (8 semesters)	<p>(i) Pass in HSE of Kerala Board or equivalent with a minimum of 50% marks in Physics, Chemistry and Mathematics put together and a separate minimum of 50% marks in Mathematics. The above marks will be relaxed by 5% in the case of candidates belonging to SEBC and a pass in the case of SC/ST candidates.</p> <p style="text-align: center;">OR</p> <p>A minimum of 45% aggregate marks in Physics, Chemistry and Mathematics put together for Management seats of Self Financing Colleges</p> <p>(ii) Should have secured a Rank in the Engineering Entrance Exam KEAM 2015.</p> <p>(iii) Applicants should have completed 17 years of age as on 31 December 2015.</p>	60	62
2	Under graduate	Computer Science and Engineering	do	do	120	79

3	Under graduate	Electrical and Electronics Engineering	do	do	60	37
4	Under graduate	Electronics and Communication Engineering	do	do	120	61
5	Under graduate	Mechanical Engineering	do	do	120	126
6	Post graduate	Power Electronics	2 years (4 semesters)	A minimum of 60% aggregate mark in the Engineering Examination and a valid GATE Score	18	2
7	Post graduate	Computer Science and Engineering	do	do	18	8

13. Does the college offer self-financed Programmes?

Yes No

If yes, how many? 07

All courses offered by the institute are self –financed

14. New programmes introduced in the college during the last five years if any?

Yes No

Number : 03

15. List the departments: (respond if applicable only and do not list facilities like Library, Physical Education as departments, unless they are also offering academic degree awarding programmes. Similarly, do not list the departments offering common compulsory subjects for all the programmes like English, regional languages etc.)

Particulars	UG	PG	Research
Engineering	Electrical and Electronics Engineering	Power Electronics	
	Electronics & Communication Engineering		

	Computer Science and Engineering	Computer Science and Engineering	
	Mechanical Engineering		
	Civil Engineering		

16. Number of Programmes offered under (Programme means a degree course like BA, BSc, MA, M.Com...)

- a. Annual system :
- b. Semester system :
- c. Trimester system :

17. Number of programmes with

- a. Choice based credit system :
- b. Inter/Multidisciplinary approach :
- c. Any other (specify and provide details ;

18. Does the college offer UG or PG programme in Physical Education?

Yes No

If yes,

- a. Year of Introduction of the programme(s)..... (dd/mm/yyyy) and number of batches that completed the programme

- b. NCTE recognition details (if applicable)

Notification No.:

Date: (dd/mm/yyyy)

Validity:.....

- c. Is the institution opting for assessment and accreditation of Physical Education Programme separately ?

Yes No

19. Does the college offer UG or PG programme in Physical Education?

Yes No

If yes,

- a. Year of Introduction of the programme(s)..... (dd/mm/yyyy) and number of batches that completed the programme

b. NCTE recognition details (if applicable)

Notification No.:

Date: (dd/mm/yyyy)

Validity:.....

c. Is the institution opting for assessment and accreditation of Physical Education Programme separately?

Yes

No

20. Number of teaching and non-teaching positions in the Institution

	Positions									
	Professor		Associate Professor		Assistant Professor		Non Teaching Staff		Technical Staff	
	M	F	M	F	M	F	M	F	M	F
Sanctioned by the AICTE/UGC/University/ State Government										
Recruited										
Yet to recruit										
Sanctioned by the Management/society or other authorized bodies										
Recruited										
Yet to recruit										

M = Male; F= Female

As this is a self financing college, depending upon the requirements, the vacancies are filled.

21. Qualifications of the teaching staff:

Highest qualification	Professor		Associate Professor		Assistant Professor		Non Teaching Staff		Technical Staff	
	M	F	M	F	M	F	M	F	M	F
Permanent teachers										
D. Sc./D.Lit	-		-		-		-		-	
Ph.D.	2	2	-	1	-		-		-	
M.Phil.	-	6			-		-		1	
PG	8	1	2	-	47	58	7	12	7	29
Temporary teachers										
D. Sc./D.Lit	-		-		-		-		-	
Ph.D.	-		-		-		-		-	
M.Phil.	-		-		-		-		-	

PG	-	-	-	2	-	-
Part-time teachers						
D. Sc./D.Lit	-	-	-	-	-	-
Ph.D.	-	-	-	-	-	-
M.Phil.	-	-	-	-	-	-
PG	-	-	-	-	-	-

22. Number of Visiting Faculty / Guest Faculty engaged with the College. : NIL

23. Furnish the number of students admitted to the college during the last four academic years.

Categories	2015-16		2014-15		2013-14		2012-13		2011-12	
	M	F	M	F	M	F	M	F	M	F
SC	7	1	6	2	6	10	4	2	-	-
ST	-	-	-	-	-	-	-	-	-	-
OBC	28	19	46	38	50	42	54	32	11	21
General			219	140	236	147	193	104	206	93
Others										
Total			271	184	292	199	251	169	217	114

24. Details of students enrolment in the College during the current academic year

Type of students	UG	PG	Total
Students from the same state where the college is located	387	36	387
Students from other states of India	-	-	-
NRI students	68	-	68
Foreign students	-	-	-
Total	455	36	491

25. Dropout rate in UG and PG (average of the last two batches)

UG 03

PG 02

26. Unit Cost of Education

(Unit cost = total annual recurring expenditure (actual) divided by total number of students enrolled)

(a) including the salary component **79230/-**

(b) excluding the salary component **45274/-**

27. Does the college offer any programme/s in distance education mode (DEP)?

Yes

No

If yes,

a) is it a registered centre for offering distance education programmes of another University

Yes

No

b) Name of the University which has granted such registration.

c) Number of programmes offered

d) Programmes carry the recognition of the Distance Education Council.

Yes

No

28. Provide Teacher-student ratio for each of the programme/course offered

Programme	UG	Faculty: student ratio
B.Tech.	Electrical and Electronics Engineering	1:16.78
	Electronics & Communication Engineering	1:15.3
	Computer Science and Engineering	1:14.30
	Mechanical Engineering	1:23.8
	Civil Engineering	1:22.5
M. Tech.	Power Electronics	1:2.83
	Computer Science and Engineering	1:3

29. Is the college applying for

Accreditation : Cycle 1: Cycle 2 : Cycle 3 :

Cycle 4 : Re-Assessment:

(Cycle 1 refers to first accreditation and Cycle 2, Cycle 3 and Cycle 4 refers to re-accreditation)

30. Date of accreditation* (applicable for Cycle 2, Cycle 3, Cycle 4 and re-assessment only) NA

Cycle 1:(dd/mm/yyyy) Accreditation Outcome/Result.....

Cycle 2:(dd/mm/yyyy) Accreditation Outcome/Result.....

Cycle 3: (dd/mm/yyyy) Accreditation Outcome/Result.....

* Kindly enclose copy of accreditation certificate(s) and peer team report(s) as an annexure.

31. Number of working days during the last academic year. :

32. Number of teaching days during the last academic year :

(Teaching days means days on which lectures were engaged excluding the examination days)

33. Date of establishment of Internal Quality Assurance Cell (IQAC) :

IQAC has been constituted recently.

34. Details regarding submission of Annual Quality Assurance Reports (AQAR) to NAAC.

AQAR	(i)	:	NA
AQAR	(ii)	:	NA
AQAR	(iii)	:	NA
AQAR	(iv)	:	NA

35. Any other relevant data (not covered above) the college would like to include. (Do not include explanatory/descriptive information)

1. The 5 UG B. Tech and 2 PG M. Tech. programmes eligible to apply for accreditation i.e. EEE, ECE, CSE, ME, CE departments
2. The college stands as the 4th Best Engineering College in Kerala by the Directorate of Technical Education (DTE), Thiruvananthapuram, Kerala
3. Holds 3rd place in Calicut University among all Engineering Colleges.
4. State Government lists the college as the one of the highest achiever among the state's engineering colleges in B. Tech University examination results consecutively for five years (2009, 2010, 2011, 2012 and 2013).
5. The students of this college has secured 20 ranks in various disciplines.
6. The college has been awarded Academic Excellence Award twice consecutively in 2013 & 2014 by the University of Calicut.





7. The college has Eco Friendly Campus with Wi-Fi connectivity.
8. The college has an ISO 9001:2008 certification.
9. The Computer Science & Engineering, Electrical and Electronics, Electronics and Communication, Mechanical and Civil Engineering is accredited by the Institution of Engineers (India) and approved IEI Exam Centre.
10. Jyothi is an Institutional member of Indian Society for Technical Educational, New Delhi (ISTE), Institution of Engineers (India), Kolkata and Computer Society of India (CSI) and ICT Academy.
11. The college has Campus Partnership with Infosys Campus Connect, Wipro and UST Global.
12. One 250 KVA and one 62.5 KVA Generators are available in the campus to compensate electricity needs and for management/ regulation of electricity and voltage.
12. Induction Programme

The college offers induction programme to the new students admitted for UG and PG programme every year. For UG students, the programme spreads over two days in which an introduction of the course by the Principal followed by presentation of the modalities by the HOD's of various departments is given to the students. Every year, this programmes used to be inaugurated by eminent personalities. The induction programmes during the years 2012-2015 are depicted below.



Induction Programme 2012



Induction Programme (UG) 2013



Induction Programme (PG) 2013



Induction Programme (UG) 2014



Induction Programme (PG) 2014



Induction Programme (UG) 2015



Induction Programme (PG) 2015

13. Graduation Programme

The College conducts a graduation programme every year, in which those students who graduated will be provided with a certificate. The students also take an Pledge on this occasion on the ethics to be followed by an Engineer. The Graduation programme for the years 2012, 2013, 2014 and 2015 were inaugurated by Dr. Kuncheria P. Issac, Former Member Secretary, AICTE, Dr. M Abdul Salam, Hon. Vice Chancellor, Calicut University, Justice Mr. Kurian Joseph, Hon. Justice, Supreme Court of India, Padmasree Prof.(Dr.) E. D. Jemmis, Emeritus Professor, IISc., Bangaluru, respectively. The Graduation programmes during the years 2012-2015 are also depicted underneath.



Graduation Programme 2012



Graduation Programme 2013



Graduation Programme 2014



Graduation Programme 2015



Students receiving Certificates

Pledge

“We shall in thought word and deed ever endeavor to keep up the reputation and dignity of our College and the Univeristy. We pledge to explore and take into account the social environmental and ethical conswquences of our profession and work for the welfare of the entire humanity regardless of caste creed and colour.

We shall ever endeavor to uphold and promote national unity and intergrity.”

14. Various Internal Committees

In order to conduct smooth functioning of different activities in the college, various Committees have been constituted. The committees meet on a regular basis and give their recommendations to the management. The management after due consideration of the recommendations of the committees, take appropriate decisions. The various committees are given below.

Strategic Planning Committee

1. Fr. Jos Punnoliprambil (Exe. Manager) - Chairman
2. Dr. K.K Babu (Principal) - Vice Chairman
3. Er. Thomas Mathew (Administrator) - Convenor
4. Er. Bobby Peter (Asst. Administrator) - Member
5. Fr. Joju Chiriyankandath (Finance Manager) - Member
6. Fr. Roy V.I (MBA Project Manager) - Member
7. Prof. Rajappan Pillai (CSE) - Member
8. Prof. P. Ratnan(EEE) - Member
9. Project Manager - Member

Staff Selection Committee

1. Fr. Jos Punnoliparambil, Executive Manager - Chairman
2. Dr. K.K Babu, Principal - Convenor
3. Er. Thomas Mathew, Administrator - Member
4. HOD of the concerned Department - Member
5. Fr. Roy V.I, MBA Project Officer - Member
6. Subject Expert/ Spl. Invitee - Member

Purchase Committee

1. Fr. Jos Punnoliparambil, Executive Manager - Chairman
2. Er. Thomas Mathew, Administrator - Convenor
3. Mr. Baji Jose, Office Manager - Secretary
4. Dr. K.K Babu, Principal - Member
5. Er. Bobby Peter, Asst. Administrator - Member
6. Fr. Joju Chiriyankandath, Finance Manager - Member
7. HOD of the Concerned Department - Member
8. Project Manager - Member
9. Er. K.T. Joseph, Project Manager - Member

Library Committee

1. Fr. Jos Punnoliparambil, Executive Manager - Advisor
2. Dr. K.K Babu, Principal - Chairman
3. Dr. Adarsh N Gokul, Librarian - Convenor
4. Er. Thomas Mathew, Administrator - Member
5. Fr. Joju Chiriyankandath , Finance Manager - Member
6. All HODs - Member
7. PG Student Representative - Member
8. College Union General Secretary - Member

Student Grievance & Redressal Cell

1. Dr. K.K Babu, Principal - Chairman
2. Er. Bobby Peter, Asst. Administrator - Member

- | | |
|----------------------------------|----------|
| 3. Fr. John Tharayil, HOD, BSH | - Member |
| 4. Dr. Jose P Therattil, HOD ECE | - Member |
| 5. Prof. Anandavally, CE | - Member |
| 6. Dr. Baby C.B, BSH | - Member |
| 7. Student Union Chairman | - Member |
| 8. Student Union Vice Chairman | - Member |

Examination Cell (Internal)

- | | |
|------------------------------|------------|
| 1. Dr. K.K Babu, Principal | - Chairman |
| 2. Mr. Nice Menachery, ME | - Convenor |
| 3. Ms. Renju Francis, BSH | - Member |
| 4. Ms. Sobha Xavier, CS | - Member |
| 5. Mr. Aneesh Chandran, CS | - Member |
| 6. Ms. Bindhu K Rajan, EC | - Member |
| 7. Ms. Ambily Francis, EC | - Member |
| 8. Ms. Saritha P, EE | - Member |
| 9. Mr. T.R Sreesastharam, ME | - Member |
| 10. Ms. Anju M.J, CE | - Member |

Examination Monitoring Cell

- | | |
|---------------------------------------|--------------------------------|
| 1. Dr. K.K Babu, Principal | - Chief Superintendent. |
| 2. Dr. M. Balagopalan, BSH | - Senior Asst. Superintendent. |
| 3. Prof. Rajappan Pillai, CS | - Member |
| 4. Mr. Majo John, CS | - Member |
| 5. Dr. Usha Menon, BSH | - Member |
| 6. Ms. Della David, EE | - Member |
| 7. Mr. Manoj Kumar, ME | - Member |
| 8. Mr. Baji Jose, Office Manager | - Member |
| 9. Mr. Girish Kumar N.G, Office Asst. | - Member |

Transport Committee

- | | |
|---|------------|
| 1. Fr. Jos Punnoliparambil, Executive Manager | - Chairman |
| 2. Fr. Joju Chiriyankandath, Finance Manager | - Convener |
| 3. Er. Boby Peter, Asst. Administrator | - Member |
| 4. Ms. Rajitha, Manager Accounts | - Member |
| 5. All Bus Co-ordinators | - Member |
| 6. Students Representative (Male) | - Member |
| 7. Students Representative (female) | - Member |

Placement Cell

- | | |
|------------------------------------|------------|
| 1. Dr. K.K Babu, Principal | - Chairman |
| 2. Prof. Joseph Joshy, PAT Officer | - Convenor |

3. Dr. Usha Menon, BSH - Joint Convenor
4. Er. Bobby Peter, Asst. Administrator - Member
5. Fr. Roy V.I, MBA Project Officer - Member
6. Mr. Dipinkrishnan, ECE - Member
7. Ms. Renjini G, EEE - Member
8. Mr. Bineesh M, CS - Member
9. Ms. Nisha Sherif, ME - Member
10. Dr. Anitha Jacob, CE - Member

Hostel Committee

1. Dr. K.K Babu, Principal - Chairman
2. Fr. Jos Punnoliparambil, Chief Warden - Convener
3. Fr. Roy V. I, Asst. Warden - Member
4. Sr. Vivina, Asst. Warden - Member
5. Fr. Joju Chiriyankandath, Finance Manager - Member
6. Mr. Ponmaniraja, Asst. Professor, EC - Member
7. Ms. Aswathy Rajan, Asst. Professor, EE - Member
8. Students Representative (Male) - Member
9. Students Representative (female) - Member

Committee for industry – Institute Partnership Cell

1. Dr. K.K Babu, Principal - Chairman
2. Prof. S. Ratheesh, CE - Convener
3. Fr. Roy V.I, MBA Project Officer - Member
4. Dr. Usha Menon, BSH - Member
5. Prof. Joseph Joshy, Placement Officer - Member
6. Mr. Dany Varghese, Coordinator, TBI - Member
7. All HODs - Ex-officio Members

Committee for Public relations

1. Fr. Roy V.I, PRO - Chairman
2. Mr. Binoj V.J, ECE - Convenor
3. Mr. Abraham P.A, ECE - Member
4. Ms. Vidya K. - Member

Store Committee

1. Fr. JojuChiriyankandath, Finance Manager - Chairman
2. Prof. Ratnan P, EE - Convenor
3. Dr. K.K Babu, Principal - Member
4. Fr. Jos Punnoliparambil, Executive Manager - Member
5. Er. Thomas Mathew, Administrator - Member

- | | |
|----------------------------------|----------|
| 6. Ms. Divya M Menon, CS | - Member |
| 7. Fr. John Tharayil, BSH | - Member |
| 8. Mr. Akhil A Balakrishnan, EEE | - Member |
| 9. Mr. Baji Jose, Office Manager | - Member |
| 10. Sr. Teena, Store | - Member |
| 11. Mr. P.J Joseph, Store | - Member |

Anti-RaggingCell

- | | |
|---|------------|
| 1. Dr. K.K Babu, Principal | - Chairman |
| 2. Er. Boby Peter, Asst. Administrator | - Convenor |
| 3. Mr. Majo John, CS | - Member |
| 4. Ms. Jyothis T.S, CSE | - Member |
| 5. Warden Boys Hostel | - Member |
| 6. Warden Girls Hostel | - Member |
| 7. Physical Education Lecturer | - Member |
| 8. Workshop Superintendent | - Member |
| 9. Office Manager | - Member |
| 10. Member, Ward15, Panjal Grama Panchayath | - Member |
| 11. Station House Officer, Cheruthurthy Police Station | - Member |
| 12. PTA President | - Member |
| 13. College Union General Secretary | - Member |
| 14. Canteen Manager | - Member |
| 15. College Bus Contractors (2 Nos) | - Member |
| 16. Mr. T.A Abdul Jabbar, Locally known person
(Pudavangottunjilil House, PO Vettikattiri) | - Member |
| 17. Mr. Sujith M, Computer Centre | - Member |
| 18. Mr. C.P Antony, Discipline in-charge | - Member |

Cultural Events Screening Committee

- | | |
|---------------------------|------------|
| 1. Dr. Usha Menon, BSH | - Convener |
| 2. Prof. K.C John, HOD ME | - Member |
| 3. Mr. Praveen Raj, ME | - Member |
| 4. Ms. Della David, EE | - Member |
| 5. Ms. Divya Menon, CS | - Member |

NBA Accreditation Committee

- | | |
|---|-----------------------|
| 1. Fr. Jos Punnoliparambil, Executive Manager | - Chairman |
| 2. Dr. K.K Babu, Principal | - Convenor |
| 3. Mr. Jenson Jose , EE | - General Coordinator |
| 4. Ms. Nikhila A.P, CE | - Asst. Coordinator |
| 5. Er. Thomas Mathew, ADM | - Member |
| 6. Fr. Roy V.I, MBA Project Manager | - Member |

- | | |
|---|----------|
| 7. Prof. Rajappan Pillai, HOD- CS | - Member |
| 8. Dr. Jose P Therattil, HOD -EC | - Member |
| 9. Mr. Ratnan P, HOD-EE | - Member |
| 10. Prof. K.C John, HOD -ME | - Member |
| 11. Ms. Jyothis, CS | - Member |
| 12. Ms. Sabna A.B, CS | - Member |
| 13. Mr. Abraham, EC | - Member |
| 14. Ms. Anu Sunny, EE | - Member |
| 15. Mr. Christy V Vazhappilly, ME | - Member |
| 16. Dr. Usha Menon, BSH | - Member |
| 17. Ms. Nivya Wilson, BSH | - Member |
| 18. Ms. Neethu Rose, EC | - Member |
| 19. Ms. Anju M.J, CE | - Member |
| 20. Prof. C.V Antony, Placement Officer | - Member |
| 21. Dr. Adarsh N Gokul, Librarian | - Member |
| 22. Er. K.T Joseph, Project Engineer | - Member |
| 23. Mr. Baji Jose, Office | - Member |
| 24. Ms. Rejitha, Accounts | - Member |
| 25. Mr. Sujith M, System Administrator | - Member |

NAAC Accreditation Committee

- | | |
|---|------------|
| 1. Fr. Jos Punnoliparambil, Executive Manager | - Chairman |
| 2. Dr. M. Balagopalan, BSH | - Convenor |
| 3. Dr. K.K Babu, Principal | - Member |
| 4. Er. Thomas Mathew, Administrator | - Member |
| 5. Fr. Joju Chiriyankandath | - Member |
| 6. Dr. Usha Menon, BSH | - Member |
| 7. Dr. Baby C.B, BSH | - Member |
| 8. Prof. Varghese Job, ME | - Member |
| 9. Ms. Smija Skaria, BSH | - Member |
| 10. Ms. Priya Jose, BSH | - Member |

Academic Disciplinary Action Committee

- | | |
|-------------------------------------|------------|
| 1. Dr. K.K Babu, Principal | - Chairman |
| 2. Prof. Anandavally | - Convenor |
| 3. Fr. Jos Punnoliparambil | - Member |
| 4. Fr. Roy V.I, MBA Project Manager | - Member |
| 5. Er. Thomas Mathew, Administrator | - Member |
| 6. Ms. Seenia Francis, CSE | - Member |
| 7. Physical Education Lecturer | - Member |
| 8. Prof. K.C John, ME | - Member |
| 9. Prof. Ratnan P, EE | - Member |
| 10. Mr. Dipin Krishnan,ECE | - Member |

- | | |
|--|----------|
| 11. Mr. Jenson Jose, EEE | - Member |
| 12. Ms. Sabna A.B, CS | - Member |
| 13. Mr. Sivakumar K.S, BSH | - Member |
| 14. Mr. Raghavan K, ME | - Member |
| 15. Mr. Jithin Kuriakose, ME | - Member |
| 16. Mr. Antony C.P, Discipline in-charge | - Member |

Project Committee

- | | |
|---|------------|
| 1. Fr. Jos Punnoliparambil, Executive Manager | - Chairman |
| 2. Fr. Joju Chiriyankandath, Finance Manager | - Convener |
| 3. Dr. K.K Babu, Principal | - Member |
| 4. Er. Thomas Mathew, Administrator | - Member |
| 5. Er. Bobby Peter, Asst. Administrator | - Member |
| 6. Fr. Roy V.I, MBA Project Officer | - Member |
| 7. Er. K. T Joseph, Project Manager | - Member |

Anti Narcotic Cell

- | | |
|---|-------------------|
| 1. Dr. K.K Babu, Principal | - Chairman |
| 2. Prof. K.C john, HOD ME | - Vice Chairman |
| 3. Mr. M.G Cyriac, CE | - Convener |
| 4. Prof. Vivek Lukose, EC | - Joint Convener |
| 5. Smt. Bindhu Suresh, GramaPanchayath President- | Trustee |
| 6. Smt. Sreela Prasad, Ward Member | - Chief Executive |
| 7. Excise Range Inspector | - Member |
| 8. Medical Officer , PH Centre Panjal | - Member |
| 9. Er. Bobby Peter, Asst. Administrator | - Member |
| 10. Prof. Radhamany A, HOD CE | - Member |
| 11. Prof. Rajappan Pillai, HOD CSE | - Member |
| 12. Dr. Jose P Therattil, HOD ECE | - Member |
| 13. Prof. Ratnan P, HOD EEE | - Member |
| 14. Fr. John Tharayil, HOD BSH | - Member |
| 15. Mr. Abin Johns, ECE | - Member |
| 16. Mr. Jose M.T, PTA President | - Member |
| 17. Smt. Philomina M.J, PTA Vice President | - Member |
| 18. College Union Vice Chairman | - Member |
| 19. Ms. Neeraja, WDC | - Member |
| 20. College Union Secretary | - Member |
| 21. Ms. Susan Shaju, Student Rep. (S6 CSE) | - Member |
| 22. Anti-Ragging Cell Convenor | - Member |
| 23. Mr. Sivakumar K.S, N.S.S Coordinator | - Member |

Research and Development Cell

1. Fr. Jos Punnoliparambil, Executive Manager - Chairman
2. Dr. K.K Babu, Principal - Vice Chairman
3. Dr. Jose P Therattil, HOD ECE - Convenor
4. Er. Thomas Mathew, Administrator - Member
5. Fr. Roy V.I, MBA Project Officer - Member
6. Prof. K.C John, HOD ME - Member
7. Dr. Anitha Jacob, CE - Member
8. Dr. Usha Menon, BSH - Member
9. Dr. Baby C.B, BSH - Member
10. Dr. M. Balagopalan, BSH - Member
11. Dr. Adarsh N Gokul, Librarian - Member
12. Prof. Ratheesh, CE - Member
13. Mr. Biju C.V, ME - Member
14. Mr. VivekLukose, EC - Member

Campus Beautification Committee

1. Dr. M. Balagopalan, BSH - Convenor
2. Ms. Jisna V.J, Coordinator-NATURA - Member
3. Ms. Jasmin Jose, BSH - Member
4. Mr. Melvin Raj, ME - Member
5. Ms. Sinu CG, CE - Member

Canteen Committee

1. Fr. JojuChiriyankandath , Finance Manager - Chairman
2. Dr. M. Balagopalan, BSH - Convenor
3. Mr. K.S Sivakumar, BSH - Member
4. Mr. Girish Kumar, Office - Member
5. Ms. SmijaSkaria, BSH - Member
6. Mr. Shaju C.A, Workshop - Member
7. College Union Vice Chairman - Ex-officio Member
8. College Union General Secretary - Ex-officio Member

N.S.S Advisory Committee

1. Fr. Jos Punnoliparambil, Executive Manager
2. Dr. K.K Babu, Principal
3. Fr. JojuChiriyankandath, Finance Manager
4. Er. Boby Peter, Assistant Administrator
5. Fr. Roy V.I, MBA Project Manager
6. Mr. Sivakumar K.S, Programme Officer
7. Vallathole Nagar Grama Panchayat President
8. PanjalGramaPanchayat President
9. Ward Member, Vallathole Nagar Grama Panchayat

10. Ward Member, Panjal Grama Panchayat
11. Welfare Standing Committee Member, Vallathole Nagar Grama Panchayat
12. Welfare Standing Committee Member, Panjal Grama Panchayat
13. Dr. Baby C.B, BSH
14. Dr. Usha Menon, BSH
15. Volunteer Secretary's (2 No's)

Editorial Board of JECC News

- | | |
|------------------------|-----------|
| 1. Dr. Usha Menon, BSH | - Editor |
| 2. Fr. Roy V.I | - PRO |
| 3. Mr. Krishna Kumar K | - Library |
| 4. Ms. Nyni K.A, EC | - Member |
| 5. Ms. Nikhila A.P, CE | - Member |
| 6. Mr. Anil Antony, CS | - Member |
| 7. Mr. Abraham, EC | - Member |
| 8. Ms. Soumya C, EE | - Member |
| 9. Mr. Sreejith K, ME | - Member |

Website Committee

- | | |
|--|---------------|
| 1. Fr. Roy V.I, PRO | - Chairman |
| 2. Prof. Muraleekrishnan, HOD-CS | - Convenor |
| 3. Ms. Ramlath , TBI | - Coordinator |
| 4. Fr. Joju Chiriyankandath, FM | - Member |
| 5. Dr. Usha Menon, BSH | - Member |
| 6. Ms. Jisha Akkara, CE | - Member |
| 7. Ms. Seenia Francis, CS | - Member |
| 8. Ms. Jisna, CS | - Member |
| 9. Mr. Jobin Varghese, EC | - Member |
| 10. Ms. Nyni, EC | - Member |
| 11. Ms. Roshima, EE | - Member |
| 12. Mr. Ajith Krishnan, ME | - Member |
| 13. Ms. Renju Francis, BSH | - Member |
| 14. Mr. Antony C.V, Placement Officer | - Member |
| 15. Physical Education Trainer | - Member |
| 16. Mr. Sujith M, System Administrator | - Member |
| 17. Mr. Laiju P Thomas, Accounts | - Member |
| 18. Mr. Baji Jose, Office | - Member |
| 19. Ms. Jinphy, Library | - Member |

Internal Quality Assurance and Audit Cell (IQAAC)

1. Prof. Venugopal, EE - Convenor
2. Prof. Varghese Job, ME - Member
3. Prof. Anandavally, CE - Member
4. Dr. M. Balagopalan, BSH - Member
5. Mr. Shaiju Paul, CS - Member
6. Ms. Sindhu, EC - Member

Training & Placement and Personality Development

1. Fr. John Tharayil, HOD, BSH - Chairman
2. Prof. Varghese Job, ME - Convenor
3. Fr. Jos Punnoliparambil, EM - Advisor
4. Dr. K.K Babu, Principal - Advisor
5. Fr. Joju Chiriyankandath, FM - Member
6. Er. Thomas Mathew, ADM - Member
7. Fr. Roy V.I, MBA Project Manager - Member
8. Er. Boby Peter, AADM - Member
9. Mr. C.V Antony, Placement Officer- Member

36. SWOC ANALYSIS OF THE INSTITUTION

Strengths

A.

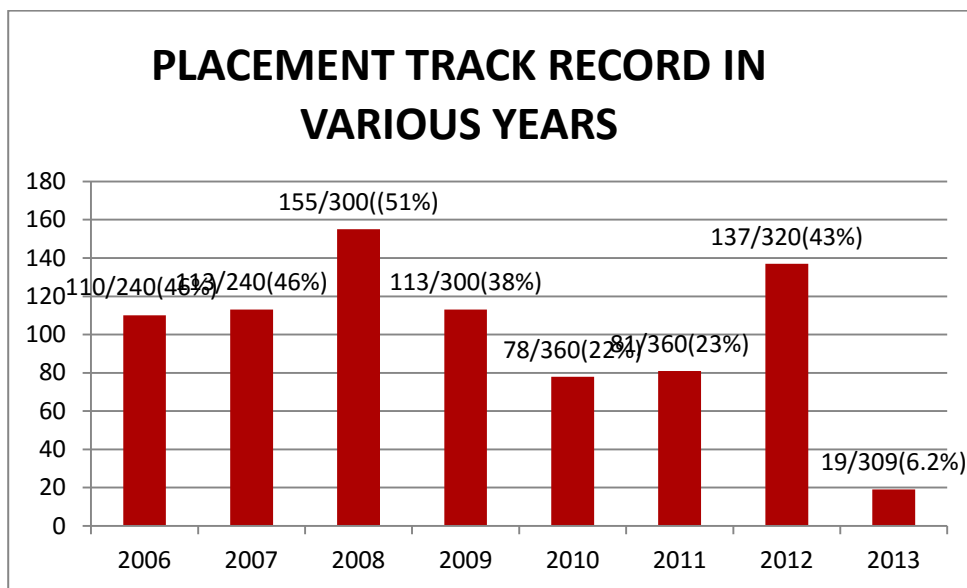
1. The college is a self supporting Engineering college for quality training of students for global workforce
2. The college is affiliated to the University of Calicut (2002) and recently to Kerala Technological University (2015)
3. The college is approved by AICTE, the national regulating Body of Higher Technical Education formulated by Government of India under the Ministry of HRD
4. The college has ISO 9001:2008 certification - an ongoing operational quality sustenance and enhancement initiative respected worldwide.
5. The college has the accreditation of the institution of Engineers (India)
6. Institutional Membership in all India technical bodies like IEEE, ISTE.
7. Government and University regulated admission rules and fee structure
8. Minority commission approved Christian Charity institution
9. Charity scholarships, bursaries and freeships exceeding Rs. 14.5 crores
10. Endowments totaling to Rs. 4.00 lakhs

11. 47.6 percent of the total number of students receives some kind of scholarship.
12. Fully automated e-Governance including e-payment portal for fee remittance
13. Instructional Manual: Tallest among its peers
14. Centre of excellence in engineering education, with excellency award for the year 2014 from the University of Calicut.
15. The college stands as the 4th Best Engineering College in Kerala by the Directorate of Technical Education (DTE), Thiruvananthapuram, Kerala
16. Holds 3rd place in Calicut University among all Engineering Colleges.
17. State Government lists the college as the one of the highest achiever among the state's engineering colleges in B. Tech University examination results consecutively for five years (2009, 2010, 2011, 2012, 2013 and 2014).
18. The students of this college has secured 20 ranks in various branches.
19. The college has Eco Friendly Campus with Wi-Fi connectivity.
20. The college has an ISO 9001:2008 certification.
21. The college is an Institutional member of Indian Society for Technical Educational, New Delhi (ISTE), Institution of Engineers (India), Kolkata and Computer Society of India (CSI) and ICT Academy.
22. The college is a centre of IEEE and ISTE events.
23. The college has Campus Partnership with Infosys Campus Connect, Wipro and UST Global.
24. 700 faculty-guided student projects.
25. Stress on spiritual living, ethical thinking and holistic student development considering students as the first segment of our service target.
26. Frequent visits of science and technology leaders
27. Relentless academic rigor and strict discipline
28. Conducts Annual state level Technical Fest THARANG with participation from other engineering colleges
29. Pat-on-the-back Awards for Faculty and Students
30. The Management sponsors faculties for FIP.
31. The college provides Project Grants for students.
32. Special Monitoring mechanism for the collection, processing, implementation and review of feedback from all segments of stakeholders
33. Regular Class Committee meetings for students to directly voice grievances even on their teachers for redress
34. Achiever support, remedial, tutorial and counseling, outdoor umbrella roofed combined study shelters and many more to ensure unrivalled academic brilliance on the campus
35. E-Governance, attendance soft ware and e-payment portal for fee remittance
36. Student-centric ICT enabled teaching methodology

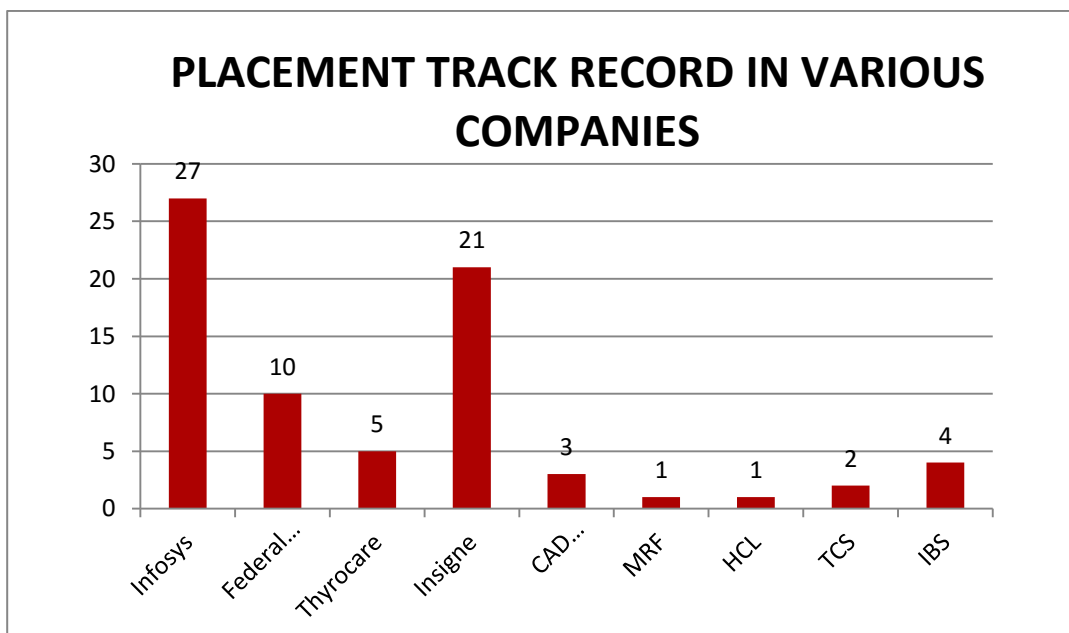
37. Faculties and students have won distinguished awards of the University

B. Industry-Institution Interface

1. The college has an industry-institution tie-up with the IT multinationals and giants
2. The college is one of the most cherished destination of recruiters like : Cognizant, , UST Global, HCL, TCS, Infosys. IBS, Nest, Wipro. Tata Elxsi Limited, Roche, Federal Bank
3. The college had an enviable Campus Placement record even in lean seasons as tabulated below:



Placement for the year 2014-15 - 74



C. Infrastructure and other amenities

1. Jyothi campus is spread over an area of 36.717 acres. The college has high rising endless concrete structures in an area of 35,600 sq. feet. This is a blend of the strength and sophistication of the contemporary with the immaculate serenity and mellowed loveliness of rustic simplicity - a unique topographic amalgam dappled with lawns, courtyards, walkways, multi-colored umbrella-study-shelters and flower laden arches.
2. The college fleets 20 transport buses and one mini bus, linking even the remotest points of the district to the campus.
3. The 792 square metre full-fledged entirely automated and aesthetically designed and most pleasingly furnished Knowledge Centre with every conceivable world class library amenities, stocking open access thousands of science and technology tracts and treatises in ink and digital formats.
4. There is a College Chapel to take care of the spiritual aspirations of the faculty and the students.
5. Laboratories and workshops of the state-of-the-art kind
6. Interactive white-boards and wide-screen LCD TV systems for every department.
7. Data Processing Lab
8. Round-the-clock campus-wide, discreetly fire-walled, Internet connectivity
9. Ex-situ Conservatory of Medicinal Plants
10. Outdoor sports and games facilities complete with gyms for both boys and girls
11. Multipurpose auditorium
12. Aesthetically furnished A/C Seminar Halls and conference enclosures with latest digital display and public address systems
13. Outdoor Green Study Parks
14. Separate Hostel facilities for boys and girls responsibly maintained and scrupulously overseen by resident wardens
15. Cost free professional counseling and sick room facility, separate for men and women.
16. Bank teller, cafeteria (2), Day-scholars Student Amenities block (both men and women) and Reception Foyer, LCD Display for current affairs and instant information empowerment.
17. CCTV surveillance network
18. On-campus stationery stores and very many
19. Mega infrastructure projects in the offing

Weaknesses:

1. Self supporting college calling for massive investment with no financial grant or any kind of support from any other sources. It is bound to suffer for providing the highest amenities while at the lowest end of governmental considerations

2. Affiliated status forecloses all possible experimental ambitions to raise the institution into a world class autonomous engineering education hub.
3. To recruit and retain faculty of high-end quality is simply impossible in a self supporting college.
4. Majority of our engineering seat seekers are not quality conscious, they seem to believe that enjoyment is what the campuses should offer, not enlightenment.
5. Outdated curriculum brings the burden of revamping it upon the shoulders of the colleges in order to make it industry relevant.
6. Research and consultancy are areas in which the new generation is least interested. They consider B.Tech as a terminal course and grab the first job that comes their way. So serious students committed to long-term concerted struggle are hard to come by. This will leave the research scene of engineering colleges bleak.

Threats

1. Global demand for engineers is steadily rising. New projects and expansion endeavors are everywhere and mobility from one shore to the other is no more a problem for job seekers.
2. During the last ten years, there has been a spurt in the number of engineering colleges in the state, causing a steady decline in the standards of students getting admitted. To train them in engineering calls for trained engineering educators, and they are a group yet to develop in our country.
3. To find them jobs also is a great task. Industry will naturally shut its door on their face, and a large number of engineers will roam the streets jobless.

Opportunities

1. Government is keen on sanctioning autonomous colleges in engineering sector. Autonomy will solve a good number of problems daunting engineering colleges now. Freedom to choose their own curriculum and examination pattern naturally will lead to higher and higher standards and this will raise standards of our engineers to a global level.
2. Healthy competitiveness among private engineering college will prompt them even for collaborations with the great institutions.
3. Everywhere the infrastructure is aging and it has to be updated. The new storms, tsunamis and other catastrophic climatic events also destroy a good number of our installations and habitats. Reconstruction of all these means to engineers a heyday.
4. Environmental, petroleum, and computer engineers are similarly in demand, both for their part in the infrastructure update and for tackling other high-priority challenges, such as climate change and energy exploration and production technology development. All these indicate enormous need for engineers.

5. Location is indeed a great opportunity for this institution. It has opened up or the college unlimited expansion possibilities.

Constraints/Challenges:

1. The explosion in the number of engineering campuses will intensify competitiveness for aspiring engineering students. If we do not have anything distinctive to offer in the course content or job opportunities, the college will suffer for want of students.
2. A fall in the number of students on the campus will affect the college and lead to financial difficulties.
3. The college will not be able to redesign the course to suit market demands because of its affiliated status. This will further worsen the condition of the institution.
4. Kerala will always be in a state of flux as far as political climate is concerned. With its tremendous clout in the University administration, political parties will play ducks and drakes with the educational system with least regard for the future of the students or the colleges.
5. Serious parents will in such a situation choose other states for the education of their children and this will further bring down the number of students on the campus. This is a vicious circle out of which the state's technical educational scenario has no escape unless strong political will proves to the contrary.

Fast Forward: Looking out into the immediate future:

1. The most ambitious project of the college's perspective plan will be the Engineering Faculty Development School with international collaboration. It has mobilized enough prowess to think of such a project from the long experiences of its Faculty Development Programs.
2. Another prospect for the future is government granting autonomy to private colleges, thereby releasing the institutions from the shackles of the affiliating system.
3. In that case, more and more state-of the-art PG Programs in emerging areas of engineering can be thought of and a research establishment devoted to processes and products mitigating sufferings of the common man can be materialized on the campus. What the establishment seeks to undertake is scientific and technological explorations with a human face.



PART - C

CRITERIA-WISE
EVALUATION REPORTS

CRITERION - I

CURRICULUM ASPECTS

CRITERION – I

CURRICULUM ASPECTS

1.1 Curriculum Planning and Implementation

1.1.1 State the vision, mission and objectives of the institution, and describe how these are communicated to the students, teachers, staff and other stakeholders.

Vision:

Creating eminent and ethical leaders through quality professional education with emphasis on holistic excellence.

Mission:

To emerge as an institution par excellence of global standards by imparting quality engineering and other professional programmes with state-of- the-art facilities.

To equip the students with appropriate skills for a meaningful career in the global scenario.

To inculcate ethical values among students and ignite their passion for holistic excellence through social initiatives.

To participate in the development of society through technology incubation, entrepreneurship and industry interaction.

Program Education Objectives:

To provide education and training to the members of the society without discrimination of caste or creed adequate to meet the challenges of modern society by establishing and running colleges, institutions and other teaching and training establishments;

To promote the message of love, moral values, non-violence and universal brotherhood;

To impart training in the field of science and technology to increase the employment potential of the youth;

To establish, organize and maintain an international Institute of Applied Science, Technology and Management in collaboration with Indian and International Universities, thereby providing much more responsive alternative to the current higher education in Science & Technology;

To establish, organize, assist, subsidies, and/or take over educational and training institutions for the benefit of the public and students in particular;

To offer full-time and part-time and short-term programmes to upgrade the technical skills of the young and talented;

To promote entrepreneurial skills among the youth;

To incorporate environmental and ecological issues in programmes and activities;

To offer research expertise to industrial firms geared to specific needs;

To acquire by gift, purchase, hire, exchange, lease or otherwise suitable land, vacant or with buildings and to build or acquire buildings, furniture, equipments, vehicles etc.

To organize, provide and maintain facilities for holding lecturers, seminars, classes, studies, courses of work, examination and tests and conferment of Degree, Diploma and certificates for professional studies, training or other attainment and holding of competitions in connection with professional subjects and arranging for and giving awards and prizes in respect of and to provide, establish, institute, administer, conduct and undertake grants, scholarships, research fellowships, rewards and other benefactions;

To print, publish and distribute reports, journals, periodicals and other relevant literature intended to promote the objectives of the Trust.

To assist the placement of educated unemployed;

To collaborate with individuals, institutions or organizations within India or abroad for the furtherance of any or all of the objectives of the Trust;

To function as a non-political and non-profit making organization;

To establish and manage professional institutions, boarding houses, hostels, libraries, etc. for the purpose of spreading education;

To do all such other lawful acts, deeds and things as the Trust may consider incidental or conducive to the attainment of any of the objectives of the Trust;

To develop, extend, improve or alter and equip all the works and activities of the Trust in such a manner as the Governing body of the Trust may deem fit;

To start, establish, and equip other educational or charitable institutions for the diffusion of useful knowledge, cultural ,scientific, technical or social and to apply for and obtain for them wherever necessary either recognition from the Government or University, educational or other authorities as the case may be;

In order to attain the above aims and objects, the Trust shall be at liberty to accept contributions and donations whether in cash or in kind by way of any movable or immovable properties.

Communication to Stakeholders:

- The Board of Trustees, Governing Body of the College and Management Committee are the three main important bodies of the college.
- The frequent meetings are held which plan programmes and discuss key issues in tune with the vision and mission of the institution.

- Decision taken in the Governing Body of the College and College Council meetings are communicated properly to the entire staff and students by displaying notices on the notice board and by reading out circulars in the class rooms.

The following criterion is followed to communicate the vision, mission and objectives of the college to the stakeholders:

- The mission, vision and objectives of the college are displayed at all prominent places in the college.
- It is communicated to the students through college prospectus, Newsletter, Handbook and also orally during the induction program and also through word of mouth communication of parents, students, teachers, staff and the alumni.
- Frequent conventions of the parents, teachers and well-wishers of the college, the College Council meetings invariably reiterate these missions as a step towards rededication.
- The vision and mission statement of the college is also placed in the college website.
- Every ceremonial occasion and campus festivity begins with a visual and musical representation of these key goals driving the institution.
- Every college communication carries the institutions vision, mission and goals in some form or other.

1.1.2 How does the institution develop and deploy action plans for effective implementation of the curriculum? Give details of the process and substantiate through specific example(s).

The college meticulously develops action plans for effective implementation of the curriculum.

Efficient curriculum implementation implies preparing students for success in education, work and life. This can be achieved through

- Discipline based learning
- Physical, Personal and Social learning
- Interdisciplinary learning

The desired result is achieved through co-ordinated quality teaching, learning and assessment practices which build student's knowledge, skills and behavior.

Developing and deploying action plans

The process:

The College council conducts frequent meetings to come out with various strategies for effective implementation of the curriculum.

All faculty members prepare course files for each subject and develop Lab. manuals for all labs and these are periodically audited and modified with new developments in the field of technology. All efforts are made to maintain the quality sustenance in curriculum delivery.

The structure of course file:

Sl. No.	Content
1	Syllabus copy
2	Academic calendar
3	Course time table
4	Handout
5	Lecture notes
6	Running notes of TWO students (optional)
7	Copies of OHP transparencies/PPT slides, if any
8	Question papers of Internal Examination Tests and additional tests; additional assignments and tutorials questions, if any
9	Two sample answer scripts each of IETs and additional tests
10	Scheme of evaluation of IETs and additional tests
11	University question papers of present and previous two years (regular & supplementary)
12	Attendance register(s)
13	Results analysis (as per given pro forma)
14	Programme Education Objectives (PEOs)
15	Programme Outcomes (POs)
16	Mapping of POs and PEOs
17	Mapping of course outcomes and POs
18	Summary of assessment of course outcomes through a) Content delivery b) Examinations, tests, assignments, etc. c) Students feedback

A detailed lecture schedule and lecture notes are prepared in all the subjects by the faculty members concerned and frequent departmental meetings are conducted to ensure effective curriculum delivery as per lecture schedules. By this, it ensures

a shared vision and shared understanding

optimum coverage of all domains within the curriculum

continuity of learning between domains across year levels

addressing of the full range of learning needs of students

cohesiveness in teaching, learning and assessment practices

elimination of repetition of learning activities and

consistently improved student learning outcomes.

Inputs:

Department faculty members are encouraged to impart the curriculum through innovative teaching methods such as presentations, assignments, discussions and also arranging workshops, seminars, industrial visits apart from regular/traditional teaching methods. Faculty members are advised to prescribe the method of instruction delivery for each topic at the time of preparing the lecture schedules.

Depending on the lecture schedules prepared by the faculty, suitable number of periods are allotted in the class time tables to see that the curriculum delivery is finished within the instruction period given by the affiliating university.

The college follows methodically the academic calendar of affiliating university for instruction delivery. Besides, it also prepares its own academic calendar incorporating the various activities of the college and also individual departments. Frequent review meetings are conducted at the department level and also at the college level to assess whether the activities are being conducted as per the academic calendar.

The meetings of class committees are held twice in a semester to review the progress of syllabus coverage and the effectiveness of the instruction delivery.

Co-curricular exercises:

These provide rich learning opportunities in Personal and Interpersonal Development, and Communication and Thinking Processes. These programs include:

Social Education Programs like NSS offered by the University and the college
Camps of various kinds (Nature Camps, Skill Development Camps, Awareness Camps on Blood Donation, etc)
Greening exercises and campaigns

These co-curricular programs have been found integral to the curriculum and so all the above programs have been placed under the charge of one or more members of the faculty reporting periodically in written formats.

As an affiliated college, the curriculum prepared by the University experts is followed and often it has to be adapted to the local relevance. The teachers have to produce a local version of the curriculum.

1.1.3 What type of support (procedural and practical) do the teachers receive ? (from the University and/or institution) for effectively translating the curriculum and improving teaching practices ?

As an affiliated college, this institution has very little to do in designing or framing the curriculum. This institution follows the curriculum assigned to it by the affiliating university. However, as members of a few university curriculum framing and designing bodies, members of our faculty play a decisive role in the process. They make their submissions on curriculum revision to update or enhance job potential to the concerned committees. At times, the University incorporates these suggestions to the final version of curriculum.

All the departments are equipped with the following resources to promote better teaching:

Resources : Internet, LCD, OHP.

The departments also conduct workshops/ refresher courses on latest topics and encourage the faculty to participate in those workshops. Further, the college deputed faculty members to various workshops held at other institutions in this regard.

Academic leave is granted to all those faculty attending workshops/seminars and also bears the expenditures incurred towards registration fee, traveling and boarding.

The college regularly organizes teacher training programme - TRAINING TEACHERS FOR EXCELLENCE - with experts drawn from other institutions. Also interactive sessions between the faculty members of the individual departments and the experts drawn from other institutions are arranged.

The College also arranges lectures on research methodologies by eminent academicians to promote research activities in the departments and also to enrich their delivery of curriculum incorporating research aspects of the subjects.

The College library procures text books suggested by the faculty members and also subscribes to various journals and technical magazines to provide effective tool for the instruction delivery. Lectures of eminent Professors on various subjects will be procured for the library and makes them available in the central and department libraries for the use of faculty.

The advanced Labs like Mobile Computing and Embedded Systems, Environment engineering are set up in the college and latest equipments are procured in various labs of the departments to promote research among the faculty members and also to strengthen the curriculum delivery by way of conducting practical.

The library and computer centers are kept open from 8:00 am to 7:00 pm to facilitate the staff member to prepare and update the course contents and also subscribes to a large number of journals for usage by the faculty.

These programs have helped our teacher community to:

- a) acquire and improve the art of teaching to achieve goals of technical higher education education
- b) keep abreast of the latest developments in their specific areas of engineering and basic sciences
- c) understand the organization and management of a modern engineering and technology institution and to perceive the role of teachers in the total system of engineering education
- d) Utilize opportunities for development of personality, innovation, inventiveness and creativity
- e) Acquire skills in the use of software tools to step up their IT capability in order to create e-content assemblers and developers and finally to
- f) Train teachers as agents of socio-economic change and national development.

Feedback support from the college:

By means of an elaborate feedback mechanism, the college keeps its teachers constantly informed of the levels of their teaching skills and subject grasp. This is one of the ways in which the teacher is also informed of the drawbacks he/she has to rectify in order to improve his/her teaching quality.

Motivational support:

The college keeps the teachers motivated by immediate and due recognition of the contributions they make to the campus life - academic as well as non-academic. The college is able to function without undue bureaucratic control as it is a self supporting affiliated college and the flexibility. It is, thus, capable of enabling the institution to permit its faculty to undertake projects and pursuits of their personal tastes. This, in turn, adds to their efficiency as teachers.

1.1.4 Specify the initiatives taken up or contribution made by the institution for effective curriculum delivery and transaction on the Curriculum provided by the affiliating University or other statutory agency.

This aspect is achieved through

Changing the learning environment from predominately teacher centered to student centered:

Team learning:

Inductive teaching and learning:

Inductive methods include (a) inquiry-based learning, (b) case-based instruction (c) problem-based learning (d) project-based learning and (e) discovery learning.

- (2) Introduction of Choice Based Credit and Semester System (CBCSS) and Internal Assessment to make the system more efficient and self-reliant:
- (3)
- (4) Implementing a constructive teaching method that allows student, to know what is expected of them and also to actually take part in the procedure:
- (5)
- (6) Extensive use of technology enabled teaching and learning process to demonstrate the students the state of the art engineering methods and procedure
- (7) Stress on blended-teaching approach not completely ignoring traditional instruction and
- (8) Introduction of streaming video as a complementary curriculum delivery method in improving students' learning.
- (9) The specific inputs like teacher FDP, ICT, labs, library and structural and nonstructural infrastructure support, digital equipment are regularly and adequately provided by the management.

(10)

⁽¹⁾ The extra-curricular activities and extension programs are also designed to supplement curricular academic training in order to fit the students seamlessly into their professional world and to respond fruitfully to their day to day societal and national obligations.

⁽²⁾ In addition to these,

the faculty members design suitable experiments to conduct in the laboratory related to the curricular subjects to make the students to understand the concepts easily.

The departments conduct workshops on latest technologies related to the curricular subjects by tying up with the industry.

Frequent industrial visits to nearby industries are arranged to provide practical exposure to the students on the subjects of curriculum.

Bridge courses are conducted wherever necessary to see that the students follow the curricular subjects without any difficulty.

Instructions on suitable content is also delivered fulfill the gaps in the curriculum.

The departmental associations conduct group discussions and technical quiz programmes to effectively implant the knowledge in students minds.

Students are also encouraged to give presentations on specific topics of the subjects to motivate them for higher studies.

College provides Video Lectures delivered by eminent Professors and encourages the students to listen to these lectures for better understanding of the subjects. Further, the library subscribes various Learning-ware modules which supply easy to learn material to students.

The college also organizes expert lectures on various subjects by inviting faculty from various fields to share their knowledge.

Remedial classes are conducted for slow learners in every subject to bring them on par with the other students.

Aligning curriculum to institutional vision and mission

The institutional vision and mission are aligned to the curriculum in the ensuing ways:

- a) By incorporating into the coursework, additional relevant components like engineering ethics, Social responsibility, management and entrepreneurial skills, conservation and environment modules, highly sophisticated industry relevant ICT, Social Networking and Non-Alcoholism. These modules are delivered in the forms of workshops. Seminars, symposia. Debates, talks and Group discussions.
- b) Programs and policies of the college are meant to motivate the students for societal commitment and national development.

- c) Added to these are the participatory non-academic extension activities of the NSS, Nature Club, and Environment Initiatives etc.
- d) The campus experience in our institution is specially tailored to urge the student community to be responsible and sensible in the exercise of their franchise, conservation of energy and other natural resources and preservation of the environment.
- e) Focus on Experiential Learning by allocating fifty percent of the UG course-work to practical projects, work experience oriented sessions and placement training is another step in the direction of aligning the institutional vision, mission and program objectives to the course content.
- f) Emphasis on Value Orientation and Social Citizenship Roles is one of the best practices the college has been following right from its inception.

1.1.5 How does the institution network and interact with beneficiaries such as Industry, research bodies and the university in effective operationalisation of the curriculum?

The departments have Development Committees comprising the eminent educationist/industrialist as members. The suggestions of these committees are incorporated in the operationalisation of the curriculum.

MOUs are signed between the departments and related industries/research organization for effective transfer of technical knowledge and know how.

Workshops/lectures are arranged by tying up with the industries/research organizations on the latest curricular subjects.

The departments take the help of Alumni Association and Training & Placement cell to maintain professional relations with the representatives of industry. The HR managers of various companies are invited to the college campus to interact with the students and faculty.

The students of various departments of the college are taken for industrial visits from time to time to keep them abreast of the latest developments in the industry.

A few members of the college faculty are actively involved in the curriculum design and development whenever the university proposes the new curriculum. The college also conducts review meetings on the latest curriculum and passes on the suggestions/comments of the faculty to the University for necessary modifications.

The faculty members are encouraged to submit research proposals to various Government research organizations/public and private sectors to receive the research grants and promote research activities in the departments.

The college is a member of various professional bodies such as ISTE, IETE, IE(I), IEEE etc. and organizes workshops in association with these bodies on latest curriculum subjects.

Institute-Research Body/University interaction

The students are encouraged to all forms of competitive inventive enterprises and their performance on such platforms has been immensely encouraging even at the national level. Engineering and Technology institutes in general and self supporting colleges in particular, are deprived of even elementary research facilities including essential scientific literature. They are, therefore, miserably isolated from active research. The students are inspired in research through various platforms like project presentations, invention carnivals and other creative opportunities.

1.1.6 What are the contributions of the institution and/or its staff members to the development of the curriculum by the University? (number of staff members/departments represented on the Board of Studies, student feedback, teacher feedback, stakeholder feedback provided, specific suggestions etc.

The number of faculty members nominated, by the University to its Curriculum Framing Committees is few because, though fully qualified, they do not belong to the aided group of colleges. Yet, they have rendered significant service in developing the curriculum with a student focus by written submissions to the concerned University committees as and when they were offered an opportunity.

1.1.7 Does the institution develop curriculum for any of the courses offered (Other than those under the purview of the affiliating university) by it? If 'yes', give details on the process (Needs Assessment, design, development and planning) and the courses for which the curriculum has been developed.

The college follows the curriculum prescribed by the University. The college also introduces innovative academic programmes in the curriculum to strengthen the technical knowledge of the students. A few of such initiatives are:

Needs Assessment, Design, development and Planning, Placement oriented skill development module.

For the enrichment, add-on modules offered by the college over and above the University UG curriculum (please see 1.1.2 above)

The purpose is to update the University syllabi or to enhance the employment potential of the core UG programs. These courses are wholly designed by our own Department faculty keeping in view the industry requirement and relevance to the core program.

The primary objective of the program is to ensure that the students who come out after their UG degree are updated in their core curriculum and have an edge over others in employability. The addition components tagged on the UG programs make them stand out from the UG degrees acquired by students from other institutions of the same University.

1.1.8 How does institution analyze/ensure that the stated objectives of curriculum are achieved in the course of implementation?

The institution has formed communication channels among all the stakeholders to ensure that objectives of the curriculum are achieved in the course of implementation. The achievements of stated objectives of the curriculum are ensured by:

Taking feedback from students on course outcomes.

Taking student feedback on faculty and content delivery.

Taking exit feedback from outgoing students on the curriculum and its implementation.

Obtaining feedback from the employers on the ability of the graduates to perform the required tasks in the industry.

A process called curriculum mapping is used to assess the extent to which the specified curriculum objectives of a program have been met. Mapping is done with examinations, class tests, and take-home work (assignments and independent study). The college produces sample examination/tests question papers, assignment sheets along with model solutions to assess how the objectives are achieved through such evaluations. This being an affiliated institution, there is a provision for additional/supplementary tests/examinations in order to cater to additional subject topics required for achieving the identified objectives.

1.2 Academic Flexibility

1.2.1 Specifying the goals and objectives, give details of the certificate/ diploma/ skill development courses etc., offered by the institution.

Keeping in mind the growing needs at state, national and global level, the college offers the following certificate/skill development courses:

The college has established English Language Communication Skills (ELCS) lab which provides soft skills training.

The time-table provides Specific hours for Library, Internet, Counselling and Additional laboratory practice.

1.2.3 Give details on the various institutional provisions with reference to academic flexibility and how it has been helpful to students in terms of skills development, academic mobility, progression to higher studies and improved potential for employability.

As an affiliated college, the institution has its limitations in offering academic mobility or progression to higher studies. The academic flexibility of the Programs is limited to the extent the university permits, and subject to university sanction, we have provisions for maximum mobility.

Skill development:

Keeping in view of the growing importance of soft skills, the college is imparting soft skills to the students' right from first year.

Along with regular subjects, exclusive sessions are allotted in the class time tables to impart training on aptitude, verbal and soft skills by external resource persons.

Academic mobility:

For providing a platform for training of students in practical environment, to enrich their knowledge about industrial environment and improve the scope and chances of students for better employment, the college conducts specialized recruit programme.

Frequent Personality development programmes are conducted to students by eminent motivators and Industry experts.

Progression to higher studies:

In house GATE coaching classes by internal subject experts are conducted by each department on regular basis.

Improved potential for employability:

To improve the potential for employability, the college is arranging systematic and continuous pre-placement training programmes and frequent mock tests to the students from pre-final year onwards by expert trainees from external training agencies

1.2.4 Does the institution offer self-financed programmes? If ‘yes’, list them and indicate how they differ from other programmes, with reference to admission, curriculum, fee structure, teacher qualification, salary etc.

The college offers the following self-financed programs. All these programs are approved by the AICTE, New Delhi and the college is affiliated to University of Calicut.

Table 1. Name of the Self Financed Programs :

Sl. No.	Department	Programme offered	Level
1	Electrical & Electronics	Electrical & Electronics Engineering Power Electronics	B. Tech. M. Tech.
2	Electronics and Communication	Electronics & Communication Engineering	B. Tech.
3	Computer Science	Computer Science & Engineering Computer Science & Engineering	B. Tech. M. Tech.
4	Mechanical	B. Tech. Mechanical Engineering	B. Tech.
5	Civil	B. Tech. Civil Engineering	B. Tech.

Table 2. Difference between Self Supporting Colleges and other colleges:

Sl No.	Parameters	Self Supporting Colleges	Other Colleges
1	Admission Eligibility	Same as for other colleges	Same condition's as for the Self Supporting colleges

2	Seat Sharing Agreement	Total numbers of seats in the college is shared at a 50:50 proportion between the college Management and the Government	As per the Government rules
3	Curriculum	Same Curricula as in other colleges colleges	No difference from that of the self supporting colleges
4	Fee Structure	As fixed by the State Government from time to time *	As fixed by the State Government
5	Teacher Qualification	As fixed by the All India council for Technical Education (AICTE), New Delhi and the UGC	As fixed by the affiliating University and the UGC/AICTE
6	Teacher Salaries	As fixed by the All India Council for Technical Education (AICTE), New Delhi and the UGC	As fixed by the State Government and the UGC/ AICTE

The fifty percent seats at the disposal of the college (30 seats per every batch of 60) are distributed among various categories of students admitted as detailed below:

Open Merit	NRI	Catholics of the diocese	Dalit Christians	Latin Christians
13	09	06	01	01

□ The existing fee structure reached at in an agreement between the college and the government is as shown below:

Sl. No.	Particulars of the fee	Amount Rs.	
1	Interest free deposit (Refundable)	1,00,000	
2	Annual Tuition Fee		75,000
3	Caution Deposit (Refundable)	10,000	
4	Admission fee		150
5	Fee for (a) Value added programs and Training (b) University and other Statutory bodies and Contribution to PTWA Fund		8,000
6	Total	1,10,000	83,150

1.2.5 Additional skill oriented 'globally and locally' relevant programs offered by the college:

We have identified a number of regional and global employability skills that would promote better productivity and performance. Please see details of these skill training modules furnished in 1.2.1 above.

1.2.6 University Provision for the flexibility of combining conventional face-to-face and Distance Mode of Education for students to choose the courses/combination of their choice

Such a provision is not available

1.3 Curriculum Enrichment

1.3.1 Institutional supplement to University's Curriculum to integrate academic programs and Institution's goals:

The college aims at excellence in technical education offering and ensuring optimum national development and self growth. It also envisages inculcating core universal values in students. Its objectives include high class state-of-the-art technical training and education coupled with personality enrichment in order to enable the students to grab opportunities at a global level.

To integrate the academic programmes and Institution's goals, the following initiatives are taken to supplement the University's curriculum:

All faculty members identify the gaps in the curriculum and include topics to bridge the gaps.

Guest lectures, Seminars, Workshops, Training programmes and industrial visits are arranged to create awareness on the current demands of industry

Assignments are given on all the subjects in addition to arranging group discussions, written/ oral tests, quizzes, role plays, etc.

The College gives impetus on English language classes to impart good communication skills among students.

Educational tours are organized to develop interpersonal relationships and to create awareness about the rich heritage and culture of our country.

N.S.S. is an additional facility which inculcates the social responsibilities and community orientation amongst the students.

Various academic competitions are conducted for all round development of the students. Many short term programmes are prepared by the college to supplement the curriculum provided by the University to enhance employability.

The Library is well stocked with books, journals, back volumes, e-books and e-journals and is kept open from 9:00 AM to 7:00 PM from Monday to Saturday and 9:00AM to 5:00PM on Sundays and public holidays.

A library hour within the class time table is provided to encourage library usage by students.

Additional experiments were designed in labs beyond University prescribed experiments.

Students were guided to take-up mini-projects.

1.3.2 What are the efforts made by the institution to modify, enrich and organize the curriculum to explicitly reflect the experiences of the students and cater to needs of the dynamic employment market?

The college has given a priority for employability, flexibility and experiential learning. For this, the curriculum is radically modified by adding to it updating, skill oriented and behavior forming modules in order to transform the students for engagement with various businesses, wide range of professions and the wider community of employers worldwide. No student walks out of our campus gates on completion of the program without trained in a skill that fits him/her straight into the job market requirements. This skill tagged on to the degree programs also include entrepreneurship training which motivates students to take up business. Industrial units of their own become future employment providers without joining the ever swelling army of unemployed engineering graduates. Apart from this, the emphasis on campus-community inter-linkage the institution gives, can certainly pave way to generating a generation of youngsters interested in community service involvement, and social entrepreneurs whose contributions will in turn lead to unprecedented national development.

But only when related to the personal experience of the students, the curriculum can actually achieve the assumed intellectual and affective outcomes. This exercise is possible only when the students possess the following:

1. the ability to discern and analyze critically
2. an appreciation of knowledge for its own sake
3. the desire to pursue lifelong, self-directed learning, and
4. a capacity for tolerance.

There is an acknowledged relationship between what and how we know (i.e., the curriculum) and what we do (i.e., experience). It is the typical techniques of teaching that we practice along with practical, projects and the like that equip our students with such experience. These techniques of teaching may be found elaborated under Criterion II on Teaching, Learning and Assessment of this report.

The college adheres to the syllabus designed by Calicut University but while delivering this syllabus content to the students, our faculty enrich it with their own expertise and experience so that the students also gain employable qualities that enable them get jobs in this highly competitive world.

The training and placement cell of the college regularly interacts with the HR managers of companies and collects first hand information about the demands and expectations of the

corporate sector regarding skill set of students. These demands of the companies are then communicated to the feedback committee which in turn formulates add on courses and extra classes which are then conducted to make up the deficiencies in the students to make them employable.

The institution enriched and organized the curriculum by supplementing it with extra content so that the students are benefited in the best possible manner.

Special training and tailor made orientation programmes are conducted to enable the students to achieve the global standards. OHP and LCD Projectors have been used for effective instructional delivery.

The students are encouraged to take up mini projects and main projects related to the real time problems. If necessary students are sent to industries or research organizations to collect the data, do the analysis and suggest probable solutions.

Project Work, Mini Project, Seminar and Comprehensive Viva-Voce are made compulsory in the final semester of the programme so that the students would acquire skills to solve problems independently.

1.4 Feedback System

1.4.1 What are the contributions of the institution in the design and development of the curriculum prepared by the University?

The institution is an affiliated college to the Calicut University/ APJ Abdul Kalam Technological University and therefore there is no scope for framing institutions curriculum on its own. However, a systematic mechanism is installed in the institution to look after the affairs of the feedback process and analysis through the College Academic Committee. The university expert teams visit the college a couple of times in a year for the purpose of extension of affiliation and affiliation of new courses. During the inspection process, the university expert team interacted with students and the faculty on several aspects of availability of facilities and teaching-learning process. Feed back is obtained by the committee and the same is conveyed to the university. In addition, the Vice Chancellor convenes meeting of Principals of all the affiliated colleges and obtains their opinion on matters of importance.

1.4.2 Is there a formal mechanism to obtain feedback from students and stakeholders on Curriculum? If “yes”, how is it communicated to the University and made use internally for curriculum enrichment and introducing changes/new programmes?

Yes. Inputs from students, alumni and employers are also taken into consideration through curriculum feed back. Regular industry interface gives the idea of new demands and requirements from the industry.

Students feedback

Analysis of current trends in the market

Consultation with the members of College Academic Council
Alumni registration forms.

The feedback of the alumni members are collected by using the Alumni registration forms, whenever the Alumni Association Meetings are held. These feedback plays a valuable role in planning the Add-on courses and training to be given to the budding engineers in the third and fourth year.

Parents: Formal and informal parent teacher meetings. Feedback of the parents is collected, from the parents, whenever they attend the Parent – Teacher Meeting, to find the academic progress of their ward, to convey their grievances regarding the infra-structure, curriculum, methodology of teaching, attendance of their ward, discipline of the student etc.

Employers/industries: Elicit opinions on the relevance of the curriculum from industry personnel and employers. The feedback of the employers is given due importance and their suggestions are analyzed, and the demand for Add-on courses is met, with regard to the demand of the students.

Academic peers Departmental meetings are being arranged regularly to discuss the curriculum. Although, these discussions are largely focused on implementation of the curriculum, suggestions regarding changes in the curriculum are also taken note of. Community Feedback is obtained from the community through interactions with the local governing bodies to address and implement social needs in student curriculum. The analysis of the feedback is done by a Feedback Evaluation Unit, which takes up the analysis and recording of the information in the feedback obtained, in a systematic manner for follow-up action.

Feedback obtained by faculty members through direct interaction with students and their guardians is discussed in departmental meetings, which takes note of the suggestions. The various suggestions proposed are once again analyzed by the College Academic Council.

1.4.3 How many new programmes/courses were introduced by the institution during the last four years? What was the rationale for introducing new courses/programmes?)

S.No.	Academic year	Program introduced	Rationale
1	2012	B. Tech. Civil Engineering	to meet the industry requirements
2	2012	M. Tech. Power Electronics	For strengthening Electrical and Electronics Engg Dept and to meet the industry requirements
3	2012	M. Tech. Computer Science and Engineering	For strengthening Computer Science Engg Dept and to meet the industry requirements

Any other relevant information regarding curricular aspects which the college would like to include.

1. Best Practices in Curriculum Aspects
2. Use of feedback on Academic Program and Teaching from various stake holders.
3. Offering a subject in the area of Environmental Studies in the curriculum.
4. of ICT in delivering and learning process.
5. Mandatory presence of external examiners for UG/PG practical examinations to ensure quality.
6. Obtaining feedback from stakeholders through informal contact to obtain information about qualitative changes which are required.
7. Emphasis on enhancing computer and internet facility.
8. Faculty members participate in workshops, seminars, conferences, symposia by participating at National and International levels organized by various institutions.
9. The faculty members enhance their ability and knowledge by attending orientation programmes and FDPs.
10. By referring to latest information and imparting the same to the students, the quality of the curricular aspects is sustained.
11. Publication of articles in magazines and journals, authoring and co-authoring of books and course material are the various ways in which the curricular quality is sustained and enhanced.
12. The faculty members upgrade their qualifications through QIPs and thereby strive for quality enhancement of curriculum.
13. In addition to curriculum, recent advancements and innovations are brought to the notice of students and faculties through seminars, assignments and guest lectures.
14. Educational Tours and Industrial visits undertaken by various departments are a part of academic culture of the institution.
15. The College has set up a Feedback Evaluation Unit for proper and timely analysis of feedback, including feedback on curriculum, so that the information can be used to advice and implement in curricular modifications by the university.
16. It has an Academic Calendar for the various courses of studies. This is expected to achieve greater integration of instruction and make lesson plan more meaningful and timely completion.
17. Maintaining professional work ethics, inculcating human values.
18. Introduction of computer lab, English Communication Skills lab. Introduction of Job oriented training.
19. Subscription to e-journals. Seminars, workshops, refresher and orientation courses are conducted and attended by the faculty.
20. Extension/Guest lectures are arranged for the students in various disciplines by inviting eminent personalities. Assignments, project work, group discussions, oral presentations form a part of the curriculum. Awareness programmes for students and staff organized by the institution.
21. The Placement Cell organizes campus interviews for UG and PG students by inviting a number of companies from the corporate sector.
22. Research guidance by the faculty members of the institution.

23. Faculty development programmes for the staff.
24. Remedial classes/ tutorial classes conducted for improving the performance of academically weaker students as per the norms of AICTE and Calicut University.
- 25.** Computer and Internet access, on-line teacher training and orientation for faculty members.
College expects to create a more equitable learning environment and provide better support for learning by students. It is hoped that this initiative will grow into a full-fledged learning management system.

CRITERION – II

**TEACHING – LEARNING AND
EVALUATION**

CRITERION-II

TEACHING – LEARNING AND EVALUATION

2.1 Student enrollment and profile:

2.1.1: How does the college ensure publicity and transparency in the admission process?

- a. Prospectus: The prospectus gives the information on the courses available in the college. It also states the various other facilities available in the College and details the extracurricular activities.
- b. Institutional Website: The details provided in the prospectus and admission details are also given on the Website www.jecc.ac.in. The website is updated on a daily basis.
- c. Advertisement in Regional/ National Newspapers: As the college is a reputed one, advertisements for admission of students are given in the news papers. Further parents, students and the general public come to know of the important celebrations, such as College Day, National and International conferences and other activities through news papers.
- d. Any other (specify)

As the college is existence for the past 13 years and is one of the well known educational establishments in this part of the state, it has earned a name for itself among the students and their parents. This is one of the most sought after college in the region and interaction among the stake holders gives enough publicity.

2.1.2: Explain in detail the criteria adopted and process of admission (Ex. (i) merit (ii) common admission test conducted by state agencies (iii) combination of merit and entrance test or merit, entrance test and interview (iv) any other) to various programmes of the Institution.

The College runs B.Tech. and M.Tech degree courses in Engineering and Technology. The minimum qualifications prescribed for admission eligibility are:

- i. The eligibility for admission into the 4-year B. Tech. Degree programs is a pass in HSE of Kerala Board or equivalent with a minimum of 50% marks in Physics, Chemistry and Mathematics put together and a separate minimum of 50% marks in Mathematics. The above marks will be relaxed by 5% in the case of candidates belonging to SEBC and a pass in the case of SC/ST candidates.

OR

A minimum of 60% marks in Physics and Chemistry put together and 45% marks in Mathematics separately. The relaxation in marks to SEBC and SC/ST candidates are applicable in this case also.

- ii. Should have secured a Rank in the Engineering Entrance Exam KEAM 2014 held by Commissioner for Entrance Exam., Govt. of Kerala.
- iii. Applicants should have completed 17 years of age as on 31 December 2014.

Admission into courses are based on the well established mode of conducting Entrance Test by the State Govt. (KEAM for B.Tech.) and admissions are done by Commissioner for Entrance Exam., Govt. of Kerala, applying the principle of merit cum reservation policy of the State Government amounting to 50% of the total admissions (Called Merit Quota). The remaining 50% admissions are being made by the management as per merit and choice following the procedure prescribed by the State Government. Supernumerary seats upto 5% are available under Tuition Fee Waiver Scheme for students whose family income is less than 4.5 lakhs and will be filled by the Commissioner for Entrance Exam.

For M. Tech., the eligibility for admission is a minimum of 60% marks in the respective branch. Those with valid GATE score are given preference.

2.1.3. Give the minimum and maximum percentage of marks for admission at entry level for each of the programmes offered by the college and provide a comparison with other colleges of the affiliating university within the city/district.

(a) The highest and lowest ranks of students in KEAM- 2015 (Academic year 2015-2016) admitted to B.Tech. Courses to Jyothi Engineering College are as follows (State Quota):

Sl. No.	B.Tech Programme	GOVT QUOTA		OBC		SC		ST
		H	L	H	L	H	L	
1	Civil Engineering	5765	49419	14636	49419	42805	46979	No student
2	Computer Science & Engineering	8940	54294	11345	49819	36063	-	No student
3	Electrical & Electronics Engineering	6687	51811	12605	47735	53194	-	No student
4	Electronics & Communication Engineering	5515	51648	17559	43818	No student		No student
5	Mechanical Engineering	6466	54552	8011	45602	45329	54552	No student

b) The highest and lowest rank of students in the KEAM – 2015 Examination admitted to B.Tech. Courses under management quota to Jyothi Engineering College are as follows.

Sl. No.	B.Tech . Programme	OM		AX	TCR
		H	L	L	L
1	Civil Engineering	9002	23099	34977	45685
2	Computer Science & Engineering	12527	29203	41207	52749
3	Electrical & Electronics	17621	40862		

	Engineering		45054	49583
4	Electronics & Communication Engineering	14209 42915	43813	46398
5	Mechanical Engineering	13638 26983	31214	32854

2.1.4: Is there a mechanism in the institution to review the admission process and student profiles annually? If ‘yes’ what is the outcome of such an effort and how has it contributed to the improvement of the process?

With respect to admission process for the merit quota seats, the State Government norms (single window system) ought to be followed. Hence, the institution doesn't have a role in the admission process.

For the management quota, admissions are made by the management as per merit and choice following the procedure prescribed by the State Government

2.1.5: Reflecting on the strategies adopted to increase/improve access for following categories of students, enumerate on how the admission policy of the institution and its student profiles demonstrate/reflect the National commitment to diversity and inclusion of SC/ST / OBC

For the single window system, as per Government norms, certain percentage of seats is reserved for students from OBC, SC and ST categories. The State Government follows 50% of reservation in all educational institutions and these seats are reserved together for Muslims, OBC/SC/ST candidates. 2% of seats are reserved for Differently abled under PH (Physically Handicapped) in Merit quota. For economically weaker sections, spernumery seats upto 5% are available under Tuition Fee Waiver Scheme for students whose family income is less than 2.5 lakhs and will be filled by the Commissioner for Entrance Exam. The State Government pays the tuition fee. However, such reservation is not applicable to management quota of seats.

Any other : Nil

2.1.6: Provide the following details for various programmes offered by the institution during the last four years and comment on the trends. i.e. reasons for increase / decrease and actions initiated for improvement:

It may be noted that the admission into courses are based on the well established mode of conducting Entrance Test by the Commissioner for Entrance Exam for B.Tech., and by the procedure as envisaged in 2.1.2. v and vi.

Admissions are made by the Commissioner of Entrance Examinations by applying the principle of a merit cum reservation policy of the State Government amounting to 50% of the total admissions (Called Merit Quota). The remaining 50% admissions are being made by the management as per merit and choice following the procedure prescribed by the State Government.

The college constantly reviews the situation with regard to employability and the demand from the public as well as the industry for certain courses. In order to fulfill the need / aspirations of the

industry and the general public, it increases the number of seats in certain courses as well as starts fresh B. Tech and M. Tech Courses.

2.2: Catering to Student Diversity

2.2.1. How does the institution cater to the needs of differently-abled students and ensure adherence to government policies in this regard?

We have not so far had any instance of differently-abled students taking admission in our College. The Government policy for the differently-abled students are strictly complied with during the admission by providing 2 % quota. However, in the college, special attention has been paid to take care of such future requirements. We have also facilities for differently-abled students like lift, special toilets, etc.

2.2.2: Does the institution assess the students' needs in terms of knowledge and skills before the commencement of the programme? If 'yes', give details on the process.

Students enter engineering colleges from three different school streams viz., State board (Malayalam and English medium), CBSE and ICSE. Their level of knowledge in key subjects and their assessment in school also varies. So the gaps at the entry level due to the above are bridged before the commencement of the first year classes, by conducting an orientation programme in the key subjects. In addition, during the academic programme, students requiring special attention in specific subjects are identified and extra coaching classes are conducted after the college working hours to improve their performance and confidence levels.

2.2.3: What are the strategies adopted by the institution to bridge the knowledge gap of the enrolled students to enable them to cope with the programme of their choice? (Bridge/Remedial/Addon/Enrichment Courses, etc.)

The students are allowed to choose electives out of 5 to 6 options offered by the university. For example computer applications and operation research, Information retrieval, artificial intelligence, multimedia, information security, Fuzzy logic and applications, maintenance and repair of buildings, highway pavement design, architecture and town planning, Satellite communications, mobile computing, cryptography and network security, automobile engineering, tool engineering and design, cryogenic engineering, energy engineering and management, numerical analysis and optimization theory, bio-medical engineering, high voltage engineering and special electrical machines are offered as electives as these are preferred by the industries and research bodies and hence increase the employability potential/higher studies progression of students. Also remedial classes are conducted after college hours for students who require it.

2.2.4: How does the college sensitize its staff and students on issues such as gender, inclusion, environment etc.?

The college does not discriminate the students and its staff on the basis of their gender. Equal opportunities are given to both the genders. During the Orientation Programme for the fresh intake

of students and during faculty induction programmes for its new staff, this stand of the institution is stated clearly.

It can be seen nearly 51% of the faculty and 40% of the student strength are women. All the necessary requirements for the ladies in the college have been adequately taken care of in the campus. There are mechanisms available for them to address any of their grievances.

Environmental education is an integral part of the academic programme. The need for conservation of energy, water, protection of the environment etc. is reiterated at every opportunity. There is an environmental forum NATURA in the college and various activities are arranged under this forum like tree planting, debate on current issues related to environment etc. Sustainable Engineering is a subject made compulsory for all B. Tech. Programmes in the first year to give the students an awareness about the environment and its protection.

2.2.5: How does the institution identify and respond to special educational/learning needs of advanced learners?

The college recognizes and promotes the skill and knowledge of the advanced learner by allowing him/her to do research projects, giving more training, bestowing awards and providing sponsorship for their travel both domestic and abroad in connection with academic requirements. All the departments have listed their achievements in this regard separately. The central library has a collection of books to help them prepare for competitive examination Viz, GATE, Civil Service etc. Students who would like to do higher studies are advised to make use of these facilities.

2.2.6: How does the institute collect, analyze and use the data and information on the academic performance (through the programme duration) of the risk of drop out (students from the disadvantaged sections of society, physically challenged, slow learners, economically weaker sections etc.)?

The college has a centralized student data system regarding academic related activities like assessment test, university examinations, internal examinations etc. The personal data will be maintained by the individual faculty counselors. Each counselor is put in charge of 30 students to monitor, shape and advice them to ensure their overall comprehensive growth and achievements. The slow learners and students from disadvantaged communities and students with low marks are given extra coaching after the normal working hours of the college. The College has the least number of drop out students or those who are at the risk of failure in its history. The problem is usually be rectified through the following measures.

1. Student counseling by faculty counselor
2. Motivation Lectures
3. Provision of scholarship (by the college) for economically backward students.
4. Special classes and tests for the needy students.
5. Discussing the student progress with their parents at regular intervals.

6. Psychological counseling conducted every year for depressed students by a special counselor.

2.3: Teaching-Learning Process:

2.3.1: How does the college plan and organize the teaching, learning and evaluation schedules? (Academic calendar, teaching plan, evaluation blue print, etc.)

The academic calendar for the year is published by the affiliating University well in advance before the commencement of class work. This academic calendar is communicated to the students. The lesson plan, indicating the topics covered lecture wise, for each and every subject is prepared by the faculty before the commencement of the semester and it is duly approved after careful examination by the Head of the Department and made available to the students. Lesson plans are also displayed on the department notice boards. The students are assessed on a continuous basis by conducting two tests per semester which are evaluated within 5-6 days after the exams. The marked answer papers are returned to the students and an opportunity is given to the students to discuss the evaluation with the teacher. These tests carry 20 marks towards internal assessments. The assignments carry 15 marks and end the semester examination carries 10 marks. The attendance is communicated to the students at the end of every month. It also carries 5 marks. An end semester model question paper is provided for reference to the students.

2.3.2: How does IQAC contribute to improve the teaching –learning process?

The College has set up an IQAC with the following members

1. Prof. Venugopal, EE - Convenor
2. Prof. Varghese Job, ME - Member
3. Prof. Anandavally, CE - Member
4. Dr. M. Balagopalan, BSH - Member
5. Mr. Shaiju Paul, CS - Member
6. Ms. Sindhu, EC – Member

The college envisions the following objectives in order to improve the student outcomes with the help of IQAC.

1. Academic objective
2. Employment objective
3. Industry objective
4. Professional objective
5. Research objective.

The cell is under the control of a senior faculty member. The above objectives gather outcome of the data from every department and its impact on the above is discussed and reviewed and presented to the Governing Body.

2.3.3: How is learning made more student-centric? Give details on the support structures and systems available for teachers to develop skills like interactive learning, collaborative learning and independent learning among the students?

• Lecture method and Interactive learning:

The faculty use chalk and board and audio visual aids in teaching. Students are also encouraged to actually interact during the lecture hour by getting their doubts clarified on the spot.

• **Project-based learning:**

During the period of study in the 6th to 8th semester, many real time projects are given to the students and they are guided by both faculty and Industry/Research personnel. Over 50% of the final year B.Tech. and M.Tech. projects are Industry based real time projects.

• **Computer-assisted learning:**

The College has over 600 computers, 58 printers, 46 application software and 18 system software/languages and 525 free software. These are effectively used for teaching. Some of the B.Tech courses are ICT enabled. The students are also encouraged to develop software for the solution of the assignments and tutorials. Many final year projects are completed through the use of software.

• **Audio-Video classes:**

All the departments of the college have class rooms with audio and video facility. This facility is made use of for classroom teaching, interactive sessions and student project presentations. The college as a policy has planned to provide all its class rooms with audio and video facility in a phased manner.

• **Experimental learning:**

Students do 2 to 3 laboratory courses per semester from 1st to 7th semesters. More than the required number of experiments, beyond the minimum specified by the University is performed. All the laboratories have excellent facilities, both hardware and software based. For the experiments, detailed instruction manuals are provided. The observations are checked and verified by faculty and record books are maintained systematically. Two faculty members and one instructor are assigned for each practical class. Majority of laboratory classes are software or modern hardware based.

• **Seminars:**

Guest lectures from experts from the Industry, Academic and Research Institutions are arranged by each Department as are one or two day workshops and seminars. Student Symposium is also organized. A Seminar period is conducted every week from the 3rd semester onwards. During this period, students give seminars on technical topics.

• **Others:**

Technical Societies and Student chapters of National/International Associations are active and students are encouraged to present technical papers at National/International Conferences. Peer interaction is done through inter collegiate student technical symposia which are arranged and conducted by students and funded by the College. During the period of the programme, many Industrial visits are arranged to the nearby industries and also an Industrial Tour is arranged in the 6th semester by each Department. Through these, the students visit many industries across the

country. The student attendance in the classes is entered into a centralized computer system CAMPUS BOOK which generates the attendance report every month. This is communicated to the students. The Internal Marks system mandated by the University is based on the marks obtained by the student in the two continuous assessment tests and assignments. These are computerized. There is complete transparency in the internal evaluation of the students. Progress (marks and attendance) is conveyed to the students regularly and to the parents periodically.

2.3.4: How does the institution nurture critical thinking, creativity and scientific temper among the students to transform them into lifelong learners and innovators?

Along with the course, the current problem associated with a particular topic of study is normally explained to the students to make them to think towards finding a solution for a particular problem. Once the student is willing to take up the scientific issue, then brain storming discussions with the faculty member of that area will be encouraged. This makes the student think and apply his creativity and scientific temper towards a particular scientific problem which transforms the student into becoming a life-long learner and innovator.

Specialized lectures given by experts from the industry expose the students the current developments and areas of research which kindles their creative abilities. This has led our students to innovative projects and achievements. Alumni meetings are arranged once in a year.

The meeting provides the students with a chance to interact and learn from the successful industrialist and entrepreneurs. They also motivate the students to excel in future endeavors.

2.3.5 What are the technologies and facilities available and used by the faculty for effective teaching? Eg: Virtual laboratories, e-learning - resources from National Programme on Technology Enhanced Learning (NPTEL) and National Mission on Education through Information and Communication Technology (NME-ICT), open educational resources, mobile education, etc.

Faculty members use e-learning - resources from National Programme on Technology Enhanced Learning (NPTEL), working models, open course ware from national and international universities and animation videos which explain the process for effective teaching. Also, Multimedia are used for various skill development. ICT usage such as Tablets with data storage facility, remote pointer, OHP, guidance for students to access NPTEL to get learning material, are incorporated too.

2.3.6 How are the students and faculty exposed to advanced level of knowledge and skills (blended learning, expert lectures, seminars, workshops etc.)?

The college sponsors and arranges FDP/workshop for faculty members. Lectures by eminent people from industries/other academic institutions are arranged at regular intervals. The College sponsors and encourages the students and the faculty to present the papers. The encouragement to the faculty is given to publish paper in the refereed journals. In the intranet, IEEE journals are available online. There are good collections of recently published books in main department libraries.

2.3.7: Detail (process and the number of students/benefitted) on the academic, and psychosocial support and guidance services (professional counseling/ mentoring/academic advise) provided to students?

Each group of 30 students is put under charge of a faculty counsellor. This is done during the first year and the faculty counsellor will continue to monitor the growth of the students and his/her academic needs and do general counseling till the student graduates from the college. Some students are given intensive counseling by the faculty of the department and from external experts. The faculty advisor/counselor is constantly in touch with the parent/guardian. Counseling about professional matters is given by the College Placement Officer on a regular basis and experts from the industry are invited now and then to brief and guide the students.

2.3.8: Provide details of innovative teaching approaches/methods adopted by the faculty during the last four years? What are the efforts made by the institution to encourage the faculties to adopt new and innovative approaches and the impact of such innovative practices on student learning?

The following innovative teaching methods are adopted by the faculty.

1. Computers are used for teaching purposes and internet facility is available for the students and faculty.
2. OHPs, LCDs, videos etc. are used for teaching purposes.
3. Online availability of IEEE journals in the intranet.
4. Good collections of recently published books in library
5. Well structured lesson plans are prepared/revised for all theory and practical courses on a period to period basis, scrutinized by HODs and made available on the notice boards and in the website for students access.
6. Teachers are encouraged to publish in Journals and present papers at Seminars and Conferences.
7. Teachers are sponsored for Ph.D. programmes with sabbatical leave and in some cases study leave is given.
8. Teachers are deputed with full financial support to attend Workshops/ Conferences/ FDPs.
9. Research and R & D are promoted and encouraged and efforts are made to obtain sponsored R & D and consultancy projects.

The impact of such innovative practices is that the students are exposed to new modern methods of teaching and more and better understanding of the knowledge transferred to them within the allotted time. It helps to assess and improve the teaching-learning process that happens from the formative to summative period.

2.3.9: How are library resources used to augment the teaching-learning process?

The following library benefits are available for the faculty and students

1. Online Public Access Catalogue (OPAC)
2. Reprographic Service
3. Book Reservation
4. Internet Access
5. Reference Service
6. Competitive Examination Books
7. Multimedia Service
8. Old (Previous years) Question Paper from University
9. Digital Library- E-Books, E-Journals & E-Lectures

The central library has more than 39860 volumes of books and subscribes to 85 technical and scientific print and e-journals and NPTEL. The Library has 517 E – Resources. It has a Built-up area of 768 Sq.mts in First & Second floor. It caters to the needs of all courses with open access to the students. All the books are bar-coded in the library & barcode laser scanners are used in the circulation counter for book transaction. Periodical Journals in Print/online like IEEE, Springer (Engineering and Mechanical), ASCE, IEI, ACM, IAS, ASTM Digital Library, J-Gate,. etc. are available. More than 25 e-books are available in the Library. The library is open on all working days (except Government holidays) from 9.00 am to 7.00 pm and on weekend from 9.00 am to 5.00 pm. Students can access e-journals during the library hours and after college hours. Also all the departments have departmental libraries with text books and journals. The students are also allowed to use the departmental library. Teachers and students effectively use the library to enrich their knowledge.

2.3.10: Does the institution face any challenges in completing the curriculum within the planned timeframe and calendar? If ‘yes’, elaborate on the challenges encountered and the institutional approaches to overcome these.

No. The college has not faced any challenge in completing the curriculum within the planned time frame. The affiliating university has prescribed a minimum of 16 weeks of instruction per semester. The planned time frame and the academic calendar for each semester gives scope for extra hours and that is fully exploited by the institution.

2.3.11: How does the institute monitor and evaluate the quality of teaching learning?

In every semester, the college conducts two mid-semester tests. Each Mid-semester examination is of 3 hours duration. The Mid - 1 is conducted covering one half of the modules. The Mid- 2 is conducted at the end of the semester covering the remaining modules of the syllabus.

The average of two Mid-Semesters examinations are taken as sessional marks out of 30. There is a model examination. The performance of the students in each subject and the ability of the teacher concerned in producing better results are evaluated.

2.4: Teacher Quality :

2.4.1: Provide the following details and elaborate on the strategies adopted by the college in planning and management (recruitment and retention) of its human resource (qualified and competent teachers) to meet the changing requirements of the Curriculum:

Qualifications of the teaching staff:

Highest qualification	Professor		Associate Professor		Assistant Professor	
	M	F	M	F	M	F
D. Sc./D.Lit	-	-	-	-	-	-
Ph.D.	2	2	-	1	1	-
M.Phil.	-	1	-	-	-	6
PG	9	1	2	-	47	58

Faculty selection is done by the interview selection committee which consists of Executive Manager, Representatives from management, Principal and HOD. The process of selection consists of a brief lecture by the applicant followed by a technical interview. The AICTE/ Affiliating university norms for the qualification and experience are strictly followed. The effective mechanism in recruiting qualified faculty is thus achieved. This is periodically done based on requirement as per the student staff ratio and to meet the changes in the university curriculum and addition of new courses.

2.4.2: How does the institution cope with the growing demand/ scarcity of qualified senior faculty to teach new programmes/ modern areas (emerging areas) of study being introduced ? Provide details on the efforts made by the institution in this direction and the outcome during the last three years.

In all the new courses added and to teach subjects of emerging areas, the college has always strived to employ persons of repute with domain expertise. The retired faculty from reputed institutions, Universities and research organizations are invited to take up teaching assignments by paying them handsome salaries and perks. The same trend has been followed for all the new additional courses and in the emerging areas. Also, the college encourages young faculty members to pursue research through QIP and/or Part time external registration for Ph.D. and offers incentive for Ph.D. holders to retain them in the college. Encouragement is also given for continuing research by way of applying for funded projects and getting the grants from various research agencies. Further faculty have been sponsored to attend FDP/Workshops regularly to enhance the knowledge and skills in the emerging areas.

2.4.3: Providing details on staff development programmes during the last four years, elaborate on the strategies adopted by the institution in enhancing the teacher quality.

a) Nomination to staff development programmes :

This has been given separately by each department

b) Faculty Training programmes organized by the institution to empower and enable the use of various tools and technology for improved teaching-learning:

This has been given separately by each department

Faculty Training Programmes organized by the college:

This has been given separately by each department

c) Percentage of faculty:

- Invited as resource persons in Workshops/Seminars/Conferences organized by external professional agencies ----- 10%
- Participated in external Workshops / Seminars / Conferences recognized by national/ international professional bodies -----60%
- Presented papers in Workshops / Seminars / Conferences conducted or recognized by professional agencies ----- 40%
- Periodic review/ monitoring by Senior faculty
 - i. The senior faculty members are asked to train the junior faculty members for increasing the effectiveness of teaching and learning process.
 - ii. They also visit the class and give their feedback to the junior faculty members.

2.4.4: What policies/systems are in place to recharge teachers? (eg: providing research grants, study leave, support for research and academic publications teaching experience in other national institutions and specialized programmes industrial engagement etc.):

Incentives for Ph.D. qualification and sponsorship for pursuing Ph.D. in full time or part time mode.

Facilitation to pursue research work by procuring necessary equipment, software etc.

Earlier Faculty possessing UG qualification were encouraged to pursue their PG to comply with the AICTE rules and regulation.

Faculty members are encouraged to attend FDP/STTP/Seminar/Workshop etc and they are also sponsored to attend conferences both domestic and international. Sponsorship to publish papers in national, International journals and conferences.

2.4.5: Give the number of faculty who received awards / recognition at the state, national and international level for excellence in teaching during the last four years. Enunciate how the institutional culture and environment contributed to performance/achievement of the faculty?

1. Prof. C. Muraleekrishnan, Professor, Computer Science and Engineering has been awarded the SADGURU Award by University of Calicut.
2. Prof. Rathish, S. has been awarded the best Paper Presentation award in the Indian Water Works Association

3. Dr. Anitha Jacob has been awarded the Best Research Paper Award in Roads - 2013 in the Indian Roads Congress, instituted by Bihar PWD.
4. Anitha Jacob was First Rank for M. Tech of NIT Calicut
5. Ms. Fousiya, K. K was Topper for M. Tech course of University of Calicut
6. Dr. M Balagopalan has been awarded International Plant Scientist award in 2006 instituted by Academy of Plant Sciences

Dr. M Balagopalan is a Fellow, International Congress on Chemistry and Environment

Dr. M Balagopalan is a Fellow, Academy of Plant Sciences

7. The college provides the following :
 - The faculty members are encouraged to participate in the conference and workshops both at national and international level. They are given OD for participation and also TA/DA.
 - Faculty provided with PC and internet facility in the department.
 - Wi-Fi connection in the campus for all. Access to large number of on-line journals.
 - The academic ambience in the campus contributes largely to more such achievements.

2.4.6: Has the institution introduced evaluation of teachers by the students and external Peers? If yes, how is the evaluation used for improving the quality of the teaching learning process?

Yes - A feedback system by the students is in vogue and faculty members with excellent feedback are motivated while preparing the performance appraisal. The format is as follows:

STUDENT'S FEEDBACK ON FACULTY

File No: -----

PROGRAMME:
B.Tech

Branch: -----

Semester: -----

Month and Year: -----

-

Batch: -----

Total No. of Students: -----

-

5-Excellent; 4-V.Good; 3-Good; 2-Fair; 1-Poor

Sl.No	Parameters Evaluated	1*	2	3	4
1	Subject is well planned and organized	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2	Punctuality of teaching	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

3	Regularity in handling the subject				
4	Preparation for the class				
5	Provide course material and question bank				
6	Teacher always sticks to time				
7	Sound is audible and clear				
8	Encourages asking doubts				
9	Speed of presentation				
10	Repeats salient points				
11	Explain with examples if necessary				
12	Use of PPT and visual aids				
13	Completes the topics in appropriate time				
14	Body language is good				
15	Give references at the end of the class				
16	Give assignments in suitable time				
17	Conduct tests as per semester plan				
18	Evaluation is fair and impartial				
19	Conducts quiz and class seminars				
20	Value and return the answer papers on time				
	Total				
	Average				

Note-Students having above 90% attendance are eligible for the participation in the evaluation

1*, 2 , 3 and 4 are Subject Code Subject Name

STUDENT'S FEEDBACK ON LAB

File No: -----

PROGRAMME: B.Tech		Branch:
Semester:		Month and Year:
Batch:		Total No. of Students:

5-Excellent; 4-V.Good; 3-Good; 2-Fair; 1-Poor

Sl.No	Parameters Evaluated	1	2
1	Satisfied with your batch size		
2	List of experiments and cycle of Experiments were informed in advance		
3	Lab manual was available in advance		
4	The faculty/technical staff helped you during experiment		
5	Consumables were available as per requirement and good quality		
6	All equipments / machines were in working condition		
7	Could you complete all experiments in time? If not, could you get facility to complete it		
8	Rough record were corrected and fair record were valued on time		
9	Did you get time to repeat the experiment		
10	Could you get facility to conduct experiments over and above university syllabus?		
	Total		
	Average		

1* and 2 are Subject Code Subject Name

STUDENTS FEEDBACK ON FACULTIES- ANALYSIS

Ref: -----

File: -----

PROGRAMME: B.Tech

SEMESTER: 8

NO	Subject Code	Name of Faculty	Mark in %	Avg Grade	Remarks
1	1	A			
2	2	B			

3	3	C			
4	4	D			

- Lecture classes are monitored by senior Professors and the HoD of the Department. They give constructive comments to improve the quality of teaching and the teaching- learning process.
- Counseling by the respective HOD for the faculty member who has secured low scores and negative comments, if any, in the feedback. This motivates them to improve their skills and abilities.
- If required training /orientation programmes are conducted by professional experts to hone the skills of the faculty members in the nuances of teaching, thus improving the efficacy of teaching-learning process.

2.5 Evaluation Process And Reforms:

2.5.1 How does the institution ensure that the stakeholders of the institution especially students and faculty are aware of the evaluation processes?

The stakeholders are ensured of the evaluation process by the following means:

- The evaluation process is discussed thoroughly in the staff council meeting and the required changes are brought in and the students and the faculty are informed about it.

2.5.2. What are the major evaluation reforms of the university that the institution has adopted and what are the reforms initiated by the institution on its own?

B.Tech. Evaluation Scheme:

Assessment of students for each subject is done by internal continuous assessment and Semester-End examinations. Internal assessment is conducted throughout the semester. It is based on internal examinations, assignments (such as home work, problem solving, group discussions, quiz, literature survey, seminar, term project, software exercises, etc.) as decided by the faculty handling the course, and regularity in the class. Assignments of every semester shall preferably be submitted in Assignment Book, which is a bound book similar to laboratory record. Semester-End examinations of theory and practical subjects are conducted by the University. Semester-End examinations of combined first and second semesters and 3rd to 6th semesters are conducted only once in a year; failed or improvement candidates will have to appear for the Semester-End examinations along with regular students. However, Semester-End examinations of 7th and 8th semesters are conducted once in every semester. The Head of institution takes necessary steps to prevent any malpractice in the Semester-End examinations. If any such instances are detected, they are reported to the University without any delay. Internal assessment marks of each theory subject have a class average limited to 80%. If the class average of internal assessment marks of any theory subjects is greater than 80%, existing normalization procedure is applied to limit it to 80%. If the class average is not greater than 80%, absolute marks should be given.

For practical subjects, internal assessment marks and Semester-End examination marks should individually have a class average limited to 75%. If the class average of internal assessment marks

or Semester-End examination marks of practical subjects is greater than 75%, the existing normalization procedure is applied to limit the class average to 75%. If it is not greater than 75%, absolute marks are given. All the students in the nominal roll of the class on the closing day of semester should be considered for normalization of internal marks. All the students who have passed the Semester-End practical examination are considered for normalisation of marks of Semester-End practical examinations.

Internal assessment marks of theory and practical subjects, both absolute and normalised, are published in the college 10 days before sending it to the University so as to enable the students to report any corrections.

(a) Assessment in Theory Subjects

The marks allotted for internal continuous assessment and Semester-End university examinations are 30 marks and 70 marks, respectively with a maximum of 100 marks for each theory subject.

The weightage awarded to internal continuous assessment marks is as follows:

Test papers (minimum two) – 60% Assignments (minimum two) such as home work, problem solving, group discussions, quiz, literature survey, seminar, term-project, software exercises, etc. – 30% Regularity in the class – 10% Full credit for regularity in the class can be given only if the candidate has secured minimum 90% attendance in the subject. (b) Assessment in Practical Subjects Internal continuous assessment and Semester-End practical examinations will have 1:1 weightage in the student's performance of practical subjects, with 50 marks allotted for internal continuous assessment and 50 marks for Semester-End examinations. An external examiner and an internal examiner, appointed by the University, shall who conducts the Semester-End examinations of practical subjects. These examiners necessarily have a minimum two years industrial experience/teaching experience at engineering degree level. Award of marks in the Semester-End practical examinations (except Project) should be as follows:

Fair record – 10%

Viva voce – 20%

Procedure and tabulation form, Conducting experiment, results and inference – 70%

No candidate will be permitted to attend the Semester-End practical examinations unless he/she produces certified record of the laboratory.

Strict measures will be taken by the University to monitor the laboratory facilities, laboratory experiments conducted, standard of Semester-End practical examinations, etc. in every affiliated engineering college. In this regard, an expert team comprising of at least three subject experts from government/government-aided engineering colleges from within/outside the University is formulated to assess these aspects in affiliated engineering colleges. This expert team visits each engineering college at least once in a semester and submit a detailed report to the University regarding the laboratory facilities, laboratory experiments conducted, and the standard of Semester-End practical examinations in each college.

Pattern of Questions for Semester-End Examinations of Theory Subjects

The question papers of Semester-End examinations of theory subjects are able to perform achievement testing of the students in an effective manner. The question paper is prepared

- (a) covering all sections of the course syllabus
- (b) unambiguous and free from any defects/errors
- (c) emphasizing knowledge testing, problem solving & quantitative methods
- (d) containing adequate data/other information on the problems assigned
- (e) giving clear and complete instructions to the candidates. The duration of the semester-End examination will be 3 hours each.

The pattern of questions for theory subjects shall be as follows:

PART A: Short answer questions (one/two sentences) 5 x 2 marks=10 marks

All questions are compulsory.

There should be at least one question from each module and not more than two questions from any module.

PART B: Analytical/Problem solving questions 4 x 5 marks=20 marks

Candidates have to answer four questions out of six.

There should be at least one question from each module and not more than two questions from any module.

PART C: Descriptive/Analytical/Problem solving questions 4 x 10 marks=40 marks

Two questions from each module with choice to answer one question.

Maximum Total Marks: 70

Weightage for categories such as problem solving, descriptive, drawing, or diagrammatic questions shall be specified along with the syllabus of any subject, if necessary. Model question paper shall be prepared for each subject at the time of framing the syllabus. This same model question paper along with the syllabus must be sent to the question-paper setter every time for framing the questions. The model question paper shall be made available to students. B.Tech. Degree Course Regulations It is permitted to have an entirely different pattern of questions especially for subjects involving drawing, design, etc. However, the modified pattern to be followed shall be clearly specified along with the syllabus of the particular subject. All question paper setters should supplement the scheme and key for the evaluation.

Minimum for Pass

- (a) A candidate who secures not less than 40% marks in a subject at the SemesterEnd examinations and
- (b) not less than 50% of the total marks assigned to the subject, shall be declared to have passed the examination in that subject.

OR

(c) A candidate who secures in Semester-End examination itself, 40% of the total marks assigned to a subject shall also be declared to have passed the examination in that subject. The total marks assigned to a subject in the above calculations is the sum of maximum marks assigned to the Semester-End examination and maximum internal assessment marks of that subject. Candidates will be assigned grades according to the marks scored.

For Seminar, Project, and Viva Voce (in 8th semester), the minimum for a pass shall be 50% of the total marks assigned to the respective examination. A student who does not secure this pass marks in a subject will have to repeat the respective subject. If a candidate has passed all examinations of B.Tech. course (at the time of publication of results of eighth semester) except Viva-Voce in the eighth semester, a reexamination for the Viva-Voce should be conducted within one month after the publication of results. Each candidate should apply for this Save A Semester examination within one week after the publication of eighth semester results.

Credit System

Each subject shall have a certain number of credits assigned to it depending upon the academic load and the nature and importance of the subject. The credit associated with each subject will be shown in the prescribed scheme and syllabi. Each course shall have an integer number of credits, which reflects its weightage.

Grading

The university shall award the letter grade to students based on the marks secured by them in both internal assessment and Semester-End examinations taken together in the subjects registered. Each letter grade indicates a qualitative assessment of the student's performance and is associated with a specified number of grade points. The grading system along with the grade points for each grade, applicable to passed candidates is shown below. All passed candidate will be allotted a grade S, A, B, C, D, or E according to the total marks scored by him/her. If a candidate does not pass a subject as per the conditions given in Section Minimum for Pass, he/she will be assigned an Unsatisfactory grade 'U' irrespective of his/her total marks.

If a student does not pass a subject in two attempts, the maximum grade he/she can get is 'C' when he/she passes the subject in any subsequent examination, whatever be the marks scored by him/her. A student is considered to have completed a subject successfully and earned the credits if he/she secures a letter grade other than 'U' in that course. Letter grade 'U' has zero grade point and the candidate has to write the examination again to improve the grade.

A student's performance is measured by the number of credits that he/she has earned and by the cumulative grade point average (CGPA) maintained by him/her.\

Total marks scored by the passed candidate	Corresponding Grade allotted	Grade Points
86- 100	S	10
76-85	A	8.5

66-75	B	7.5
56-65	C	6.5
46-55	D	5.5
40-45	E	4.5

Semester Grade Point Average (SGPA) and Cumulative Grade Point Average (CGPA)

A Semester Grade Point Average (SGPA) shall be computed for all the students for each semester, as follows:

$$\text{SGPA} = \frac{\sum_{i=1}^n C_i G_i}{\sum_{i=1}^n C_i G_i}$$

where, n is the number of subjects registered during the semester, C_i is the number of credits allotted to i th subject as per the scheme, and G_i is the grade points corresponding to the grade awarded to the student for the subject.

A Cumulative Grade Point Average (CGPA) shall be computed for all the students at the end of each semester by taking into consideration their performance in the present and the past semesters as follows:

$$\text{CGPA} = \frac{\sum_{i=1}^m C_i G_i}{\sum_{i=1}^m C_i G_i}$$

where, m is the number of courses registered up to that semester, C_i is the number of credits allotted to i th subject as per the scheme, and G_i is the grade points corresponding to the grade awarded to the student for the subject. An up-to-date assessment of overall performance of a student is obtained by calculating CGPA. CGPA is weighted average of the grade points obtained in all the subjects registered by the students since he entered the B.Tech. course. (c)

Both the SGPA and CGPA shall be rounded off to the second place of decimal and recorded as such for ease of presentation. Whenever the CGPAs are to be used for the purpose of determining the merit ranking in a group of students, only the rounded off values shall be made use of.

Improvement

Candidates shall be allowed to improve the grade of any two theory subjects. This can be done only in the immediate subsequent chance. If the candidate gets more marks in the improvement chance, marks scored in the improvement chance will be considered for grading in the subject; otherwise marks scored in the first attempt will be retained. No candidate shall be permitted to improve the marks scored in practical examinations and internal continuous assessment.

Attendance

A candidate shall be permitted to appear for the Semester-End examinations only if he/she satisfies the following requirements:

- (a) He/she must secure not less than 75% attendance in the total number of working hours in each semester.
- (b) He/she must earn a progress certificate from the head of the institution stating that he/she has satisfactorily completed the course of study prescribed in the semester as required by these regulations.
- (c) His/her conduct must be satisfactory It shall be open to the Vice Chancellor to grant condonation of shortage of attendance on the recommendation of the head of the institution in accordance with the following norms.
 - The shortage shall not be more than 10%
 - Shortage upto 20% shall be condoned once during the entire course provided such shortage is caused by continuous absence on genuine medical grounds.
 - Shortage shall not be condoned more than twice during the entire course.
 - Candidate who is not eligible for condonation of shortage of attendance shall repeat the semester.

Classification of Successful Candidates

- (a) A candidate who qualifies for the degree, passing all the subjects of the eight semesters within 5 academic years after the commencement of his course of study and secures not less than a CGPA of 8.00 of all the semesters shall be declared to have passed the B.Tech. degree examination in First Class with Honours.
- (b) A candidate who qualifies for the degree, passing all the subjects of the eight semesters within 5 academic years after the commencement of his course of study and secures not less than a CGPA of 6.00 of all the semesters shall be declared to have passed the B.Tech. degree examination in First Class. B.Tech. Degree Course Regulations
- (c) All other candidates who qualify for the degree passing all the subjects of the eight semesters and not covered as per Sections 21 (a) and (b) shall be declared to have passed the B.Tech. degree examination in second class.

- (d) Classification of the lateral entry student can be given based on the CGPA of 3rd to 8th semesters. The final mark-list of lateral entry students should indicate that
- (i) the student was admitted through lateral entry scheme
 - (ii) classification is based on CGPA of 3rd to 8th semesters. He/she should have passed all the subjects of the 3rd to 8th semesters within 4 academic years after the commencement of the course of study. It may be indicated in each mark-list that the internal assessment marks and SemesterEnd examination marks of practical subjects are normalised.

M. Tech. Evaluation Scheme:

The performance of the candidate in each semester shall be evaluated subject wise with a maximum of 100 marks in the internal examination and 100 marks in the end semester examination for theory subjects, and 100 marks for practical examination. There is no end semester examination for practical subject.

Course work Content

Semester 1

The student has to credit 5 theory subjects – 4 core subjects and one Elective. One core subject will be from area of Mathematics. In addition the student has to take up one seminar and one Lab.

Semester 2

The student has to credit 5 theory subjects, one seminar, and one lab/Mini project. Among 5 Theory subjects, 3 subjects are offered as core, and two as Electives.

Semester 3

The student has to credit 2 theory subjects from the two groups of Electives listed. The student has to undergo an industrial training of minimum two weeks duration during the semester break after semester 2 and complete that within 15 calendar days from the start of semester 3.

The student is required to undertake the Masters Research Project Phase I during 3rd semester and the same is continued in the 4th semester (Phase II). It comprises of Preliminary Thesis work, two reviews of the work and the submission of Preliminary report. First review would highlight the topic, objectives, methodology and expected results. The first review shall be conducted in first half of this semester. Second review comprises of the presentation of the work completed, preliminary report and scope of work which is to be completed in the 4th semester.

Weightage for the credits for Masters research project –phase I

Internal evaluation of the Project work by the Guide: 50%

Internal evaluation of the Project work by the Evaluation committee (ESE): 50%

Semester 4

In 4th semester there will be only Project work. This is the continuation of the work done in 3rd semester. There is a review in the middle of fourth semester to evaluate the progress of the project work. Towards the end of the semester there would be a pre submission presentation to assess the

quality and quantum of the work by the Evaluation committee. This would be the prequalifying exercise for the students for getting approval by the Department committee for the submission of Thesis. At least one Technical paper is to be prepared for possible publication in journal or conferences. The Technical paper is to be submitted along with the Thesis . The final evaluation of the Project will be external evaluation. The credits allotted may be proportionally distributed between external and internal evaluation as follows.

Internal evaluation of the Project work by the Guide: 25%

Internal evaluation of the Project work by the Evaluation Committee: 25%

Final evaluation of the Dissertation by the External Examiner: 25%

Project viva voce by the External and Internal Examiners: 25%

Facility for students to do project work outside the Parent Institution:

As far as possible the students shall be encouraged to do their project work in the parent institute itself. However, if found essential, they may be permitted to continue their project outside the parent institute, with the approval of the Department committee. For students who are availing this facility, the following conditions are to be observed.

- i) The students have to get the prior approval from the Department committee for availing this facility as well as choice of the institution/industry/R&D organization with which the students are associated for continuing their project work. They have to get this approval in the 3rd semester itself.
- ii) If they are doing their project work in an educational institution then the institution is to be preferably an institution of national repute like IITs, IISc etc.
- iii) Students availing this facility should continue as regular student of the parent institution itself.
- iv) They should have an external as well as an internal guide. The internal guide should belong to the parent institution and external guide should be from the institution/industry/R&D organization with which the student is associated for doing the project work.
- v) Student has to furnish a certificate from the external guide stating the willingness to supervise the Thesis work with the institution/industry/R&D organization with which the student is associated for doing his/her project work and has to submit the same for the approval of the Department committee at the beginning of the third semester.
- vi) The student has to furnish his/her monthly progress as well as attendance report signed by the external guide.
- vii) The external guide and internal guide are to be preferably present during all stages of evaluation of the project work. In case the external guide is not present, the internal guide can alone take the responsibility of conducting the evaluation.

Registration and Enrollment

- a. For the first semester every student has to enroll and register for the courses he/she intends to undergo on a specified date notified to the student. The concerned Programme coordinator/Faculty Advisor will guide the students in registration process.
- b. For the subsequent semesters registration for the courses will be done by Course coordinator during a specified week before the end semester examination of the previous semester. The registration card will give details of the core and elective courses, the project and seminar to be taken in a semester with the number of credits. The student will consult his/her Course coordinator for choice of courses. The registration card is filled in triplicate and signed by the student and Course co-ordinator .
- c. A student has to pay the semester fees before the day of registration or as per the schedule announced by the Dean/ Principal.
- d. From the second semester onwards, all students have to enroll on a specified day at the beginning of a semester. A student will become eligible for enrollment only if he/she satisfies requirements in section 11.g and in addition he/she has cleared all the dues to institute, hostel and the library up to the end of the previous semester and he/she is not debarred from enrollment .
- e. M. Tech. gate scholarship to eligible students will be paid for a maximum period of 24 months only as per existing AICTE rules/Govt. of India rules.
- f. In extra ordinary circumstances like medical grounds a student may be permitted to withdraw from a semester completely. A student will be permitted to withdraw from the programme only for a maximum continuous period of two semesters.

g. Minimum requirements to continue the Programme

- i) A student should have a minimum 75 % of overall attendance in each semester to register for the end semester examination.
- ii) A student should have registered for the end semester examination at the end of every semester.
- iii) A student should have earned not less than 26 credits at the end of the second semester and 36 at the end of the third semester.
- iv) A student will be promoted to second semester only if he/she satisfies conditions in clauses 11 g (i) and 11g (ii)
- v) It shall be open to the Vice Chancellor to grant condonation of shortage of attendance on the recommendation of the Head of the Institute in accordance with the following norms.
 - The shortage shall not be more than 10%
 - The shortage shall not be condoned more than once during the entire course
 - Candidate who is not eligible for condonation of shortage of attendance shall repeat the semester.

h. Maximum duration of the programme

A student is expected to complete the M. Tech. programme in 4 semesters. In case of students who do not complete their Project work in the 4th semester, they will be permitted to complete the project work and submit the report in the subsequent semester. The date of completion of the project work and the date of viva voce examination will be indicated in the grade card for the subsequent semester. The student shall complete the M. Tech. Degree within five academic years from the date of admission to the M Tech Programme.

i. Attendance

- i) Each teaching staff member handling a class will take attendance up to the last instruction day in the semester. Overall attendance will be calculated and displayed within a week after the last working day.

j. Leave Rules

- i) All M. Tech. students should apply to the HOD for leave stating the reasons whenever they are not in a position to attend classes/project work. They will not be eligible for GATE scholarship for the period of absence if it is unauthorized leave even if they have not fully utilized the eligible leave.
- ii) Students are eligible for leave of 30 days in a year which will be regularized 15 days per semester with a provision of carryover from first to second and third to fourth semesters. (i.e. unutilized leave from first year cannot be carried over to second year). The intervening holidays will be treated as part of leave with provision of suffixing and prefixing holidays.

Evaluation Process

In the first semester, second semester and third semester, all the subjects to be credited are evaluated through continuous assessment procedure and end semester examination. The end semester examination for all the semesters, except the first semester would be done at the respective colleges as outlined below. The end semester examination for the first semester will be conducted by the University.

a) Assessment Procedure

For Theory Subjects: Internal continuous assessments will be made during the semester. The internal continuous assessment may be in the form of periodical tests, assignments, seminars or a combination of all, whichever suits best. The assessment details as decided at the class committee will be announced to the students right at the beginning of the semester by the teacher. There will be a minimum of two tests per subject.

b) The seminars, project, Industrial training will be evaluated by the Evaluation committee. For the project and Industrial training, the students are required to submit a report of the work done/training undergone and present the contents of the report before the committee which will be evaluated. The laboratory work will be evaluated by the staff member(s) concerned.

c) In the third semester, Masters Research Project Phase I will be evaluated by the Evaluation committee. The internal evaluation of the project in the IV semester would be done by the Evaluation committee. Final evaluation of the project and dissertation would be conducted by the Guide and an External Examiner appointed by the University of Calicut.

d) End Semester Examination

There will be one End semester examination of 3 hours duration in each lecture based subject. For the End semester examination, the student has to register in the university by remitting the examination fees.

e) Project Evaluation

Project Evaluation will be taken up only after the student completes all the core, elective as well as other course requirements satisfactorily.

f) Weightage

The following will be the weightage for the different subjects.

i. Theory Subjects

Internal continuous assessment : 50%

End Semester Examination : 50%

ii. Laboratory based Subjects

internal continuous assessment : 100%

g) Normalisation

The marks obtained in the internal continuous assessment of theory subjects and laboratory based subjects and end semester examinations of 2nd and 3rd semesters shall be normalised as follows .

- (i) If the class average obtained in Internal Continuous Assessment of a theory subject is greater than 80 % it shall be normalised to 80 % .
- (ii) If the class average obtained in Internal Continuous Assessment of a lab based subject is greater than 75 % it shall be normalised to 75 % .
- (iii) If the class average obtained in End Semester Examination of a theory subject of 2nd/ 3 rd semester is greater than 70 % it shall be normalised to 70 % .

The existing normalization procedure shall be applied.

h) Make-up Examination

The following categories are eligible for make up examination.

(i) Students who have missed internal continuous assessments on valid reasons should apply to the concerned teacher, the reasons for the absence and teacher shall consider these requests suitably.

(ii) Except for the first semester

Those students who have failed in the end semester examinations or missed the end semester examination on valid reasons, should make an application to the Course Co-ordinator within 10 days from the date of missed examination or within 5 days from the publication of results (whichever is earlier). Permission to sit for a makeup examination in the subject (s) in the case of students who missed the examination is given under exceptional circumstances like hospitalization or accident to the student. However these students will not be eligible for S grade.

A student who misses this makeup examination will not be given another makeup examination.

i) Minimum for a Pass

A candidate who secures not less than 40 % marks in a subject at the end semester examination and not less than 50 % of the total marks assigned to the subject , shall be declared to have passed the examination in that subject.

j) A student is awarded a letter grade in each course he/she has registered for, indicating his/her overall performance in that course. There are eight letter grades S, A, B, C, D and U. The correspondence between range of percentage of marks, grades and points (on a 10-point scale) is given below.

Grading

Range of percentage of marks	Grade	Points
90-100	S	10
80-89	A	9
70-79	B	8
60-69	C	7
50-59	D	6
Below 50	U	0

A student is deemed to have completed a subject successfully and earned the credit if he/she secures a letter grade other than U.

A letter grade U in any subject implies failure in that subject. A subject successfully completed cannot be repeated.

k) Methods of awarding grades

i) For the first semester, University will award grades based on percentage of marks obtained in each subject as per clause 12j. The percentage of marks is calculated considering internal continuous assessment and end semester examination marks put together.

- ii) From second semester onwards grades will be awarded as per the following procedure: A final meeting of the academic committee will be convened within 7 days after the last day of the end semester examination. The letter grades to be awarded to the students for different subject will be finalized at this meeting. Two copies of the result sheets for each subject containing grade and two copies with absolute marks and the final grade should be submitted by the teacher to the concerned Academic Committee Chairman. After the finalization of the grades at the Academic Committee meeting, one copy with the absolute marks and one without the absolute marks but having only the grades will be forwarded by the Academic Committee Chairman to the Principal.

1) Declaration of results

- i) The letter grades awarded to the students in each subject will be put on the departmental notice board soon after the final Academic Committee meeting.

In case a student feels aggrieved, he/she can contact the concerned teachers for a second look at his/her performance but not later than two weeks from the commencement of the semester following the announcement of the results. The student shall have access to his/her answer paper(s) in the end semester examination which may be shown to him/her by the teacher(s) concerned.

If the teacher feels that the case is genuine he/she may reexamine and forward the revised grade, if any, to the Course Coordinator through the Chairman of the Class Committee with justification for the revision and with the intimation to Head of the Department.

- ii) The U grade once awarded stays in the record of the student and is deleted when he/she completes the subject later, indicating also the number of attempts made in that course. The CGPA will be accordingly revised deleting 'U' as the case may be in the earlier attempts in that course. The grade acquired by the student later will be indicated in the grade card of the appropriate semester.

Grade Card

1. The grade card will be issued at the end of the semester to each student by the University of Calicut based on the recommendation of the Principal.

It will contain the following:

- (a) The course code, title of the subject/project and grade secured by the candidate for each course registered for that semester.
- (b) Performance in each subject by the letter grade obtained vide 12i and 12j.
- (c) The total number of credits earned by the student up to the end of that semester.
- (d) Grade Point Average (GPA) of all the courses taken during a semester if he successfully completed all the courses in that semester.
- (e) The Cumulative Grade point Average (CGPA) of all the courses taken from the first semester onwards .

(f) Date of admission, Date of completion of the project and date of viva voce.

2. The Grade Point Average (GPA) will be calculated by the formula

$$\text{GPA} = \frac{\sum(C \times \text{GP})}{\sum C}$$

where C= credit for the course, GP= the grade point obtained for the course and the sum is over all the courses taken in that semester.

For the Cumulative Grade Point Average (CGPA), a similar formula is used except that the sum is over all the courses taken in all the semesters completed up to the point in time.

3. No rank will be awarded to the students at the end of M. Tech. course.

4. All candidates who qualify for the degree and secure not less than a CGPA of 6.5 of all the semesters shall be declared to have passed the M Tech Degree examination in First Class

5. All candidates who qualify for the degree and secure not less than a CGPA of 8 of all the semesters shall be declared to have passed the M Tech Degree examination in First Class with Distinction.

m) Eligibility for the award of M Tech Programme

A student shall be declared to be eligible for the award of M Tech degree if he/she

- a) Registered and successfully completed all the course work and the project work.
- b) Successfully acquired the minimum number of credits prescribed in the curriculum in the given stream within the stipulated time vide 11.h
- c) No dues to college.
- d) No disciplinary action is pending against him/her.

Revision of regulation

Notwithstanding all that has been stated above the University of Calicut has the right to modify any of the regulations, scheme of studies, Examination and syllabi from

2.5.6. What is the graduate attributes specified by the college/ affiliating university? How does the college ensure the attainment of these by the students?

The graduates are expected to possess a few distinguishing characteristics which are broadly termed as Graduate Attributes which are grouped as under: GRADUATE ATTRIBUTES:

- (a). Ability to Apply Mathematics-Science-Engineering in job and life.
- (b). Ability to identify, formulate, and solve Engineering problems

- (c). Ability to use the techniques, skills, and modern Engineering tools necessary for engineering practice.
- (d). Ability to Design System/ Component/ Process with Constraints to meet desired needs
- (e). Ability to design Divide and Conquer Experiments as well as analyze and interpret data.
- (f). Ability to function on multi-disciplinary teams and to exhibit Team Culture
- (g). Exposure necessary to understand the Impact of Engineering Solutions in a Global and Societal Context
- (h). A recognition of the need for, and an ability to engage in lifelong learning
- (i). Ability for Good and Effective Communication
- (j). Expertise with a knowledge of contemporary issues
- (k). Contributions to industry/academia
- (l). Understanding and demonstration of Professional and Ethical responsibilities.

The College aspires to have a transformational impact on students through comprehensive education by inculcating qualities of competence, confidence and excellence.

At the first place,

- The college aims to make its students employable.
- The college endeavors that its students should become valuable global citizens.
- To make the students academically sound enough, so that they are able to stare in the eyes of the competitive world.
- The college ensures that by the time the student finishes his/her education in the college, he/she attains all these specified attributes including social responsibility. They are quite capable of handling engineering problems.
- The faculty members of the college work rigorously throughout the academic year to enable the students imbibe the valuable lessons by way of seminars, moral lectures, presentations and field work.
- The faculty sensitizes students towards inclusive social concerns, human rights, gender and environmental issues to make them sensitive, sensible, useful and conscientious global citizens.

The methodology adopted by us is as in the flowchart below: Outcomes of the programme under accreditation)

2.5.7. What are the mechanisms for redressal of grievances with reference to evaluation both at the college and University level?

- Students having grievances with the evaluation process and all the doubt are made clear by showing his/her performance in the answer sheet

- The student is made clear about every grievance in his mind at the University level and some fees are paid by the students for this purpose.
- The grievances of the students, if any, are communicated by the principal to the controller or VC of the University.
- All grievances regarding evaluation, including the internal assessment marks awarded for the students, are redressed by the Examination Board and the various Heads of Departments
- There is a provision for re-evaluation and is permitted on request. The Registrar coordinates with the other members of the Examination board and assists students in the redressal of problems regarding conduction of examination, evaluation process and declaration of results.

2.6.: Student Performance and Learning Outcomes :

2.6.1. Does the college have clearly stated learning outcomes? If ‘yes’ give details on how the students and staff are made aware of these?

Yes. The College has clearly stated learning outcomes for its programme. The POs are published at

1. College website www.jecc.ac.in as mandatory disclosure
2. Syllabus books are issued at the time of enrollment.
3. Central Notice board displayed at length round the year.
4. Departmental Notice Boards displayed at length round the year.
5. Lesson Plans to be given by the faculty of the concerned subject.
6. Surveys: Effective and Efficient Survey among the stakeholders to elicit the information on the mechanism/procedure for continuous review and Outcome measurement.
7. Student awareness program to educate the importance of PEOs and POs.
8. Student Induction Program to introduce the concepts of PEOs and POs.
9. Faculty Meetings to frame and monitor as well as revise the PEOs and POs based on the feedback from the stakeholders.

2.6.2 : Enumerate on how the institution monitors and communicates the progress and performance of students through the duration of the course/ programme? Provide an analysis of the students results/achievements (Programme/ course wise for last four years) and explain the differences if any and patterns of achievement across the programmes/courses offered.

The college evaluates the students through two mid tests (internal) and one semester examination (final). The report is sent to the Principal after evaluation in a fair and secret manner. The parents are informed through letters and even telephonically (for weak students). The class tutors monitor the students’ performance during an academic year. The record of the whole evaluation process is transparent. Daily attendance and overall performance of the student are displayed.

2.6.3. How are the teaching, learning and assessment strategies of the institution structured to facilitate the achievement of the intended learning outcomes?

The college aims to help students to reach their potential through the provision of a supportive, vibrant and challenging learning environment. The college is committed to creating an environment where students are supported to achieve their potential and works towards creating an inclusive learning community. The curriculum, teaching and learning and assessment at college are student centric. All the staff is involved in the construction of this learning environment. All students are valued equally during their learning journey within the institute. Students are active partners with shared responsibilities for their own learning and achievement, which enhance their employability and progression opportunities. This strategy recognizes the need to develop progressively self directed and confident learners with the knowledge, skills, attitudes and values. It acknowledges that students learn most effectively if they are supported as individuals to achieve personal development and self employability.

2.6.4. What are the measures/initiatives taken up by the institution to enhance the social and economic relevance (quality Jobs, entrepreneurship, innovation and research aptitude) of the courses offered?

The college has a social as well as economic responsibility. The courses run by college have both social and economic relevance. The College understands its responsibility in the socio economic parameters. The college at the time of the admission provides counseling regarding the choice of branches the students wish to opt. They are guided regarding the future prospects of various options. The students are motivated through personality development programmes. Students are encouraged to participate in activities for social and community service. The College has made dedicated efforts to impart quality education and generate new knowledge through research and development activities. The College through the orchestrated efforts of teachers, supporting non-teaching staff and administrative officers has been generating highly skilled employable and socially responsible man power. The College has developed self reliant, enterprising and employable human resource. The college has started many programmes of under graduate, post graduate and Post Graduate Management courses.

2.6.5. How does the institution collect and analyze data on student learning outcomes and use it for planning and overcoming barriers of learning?

The college collects the data on learning outcomes form the stake holders by following the procedure given below:

Exit feedback is taken from the outgoing students every year.

The feedback from the alumni and also from the employer is collected.

The data pertaining to the graduates seeking higher education and involved in research is also collected.

The feedback collected is analyzed and the necessary modifications in the curriculum and evaluation strategies are suggested to meet the desired learning outcomes.

2.6.6. How does the institution monitor and ensure the achievement of learning outcomes?

The college has a clearly defined, set mechanism to monitor the learning outcomes. Program Outcomes are established through the consultation process with stake holders keeping the Graduate Attributes defined by NBA as the basis. Department Vision, Mission and Program Educational Objectives are also kept in view. The professional society guidelines on curriculum and graduate outcomes are also considered. The detailed establishment process is depicted in the figure below:

Program Outcomes defined below are envisaged in the broad context of the proposed program objectives.

The learning objectives and outcomes are adequately complemented during the course work with adequate exposure to continuous changes in different Engineering fields in order to enrich and strengthen the program.

For instance, the graduates acquire adequate knowledge in using the state of art computational tools to solve complex Engineering problems.

- a. An ability to apply knowledge of mathematics, science and Engineering to Electronics and Communication Engineering problems.
- b. An ability to design, develop and conduct experiments as well as analyze problems and interpret data.
- c. An ability to design electronic systems and component or process to meet desired needs with in realistic constraints.
- d. An ability to function on multi-disciplinary tasks by applying the principles and practices of Electronics and Communication Engineering.
- e. An ability to identify, formulate and solve Electronics and Communication Engineering problems.
- f. An ability to understand social, professional and ethical issues related to Engineering. g. An ability to communicate effectively in oral, visual and written forms.
- h. An ability to understand the impact of engineering solutions on the society in a global economic, environmental and social context.
- i. An ability to skillfully use modern scientific and engineering tools and techniques necessary for Engineering design, analysis and applications to advance further the knowledge acquired.
- j. An ability to develop confidence for self education and to engage in lifelong learning to follow development in Electronics and Communication Engineering.
- k. An ability to use the technical skills and modern Engineering tools.

CRITERION - III

**RESEARCH, CONSULTANCY
AND EXTENSION**

CRITERION - III

RESEARCH, CONSULTANCY AND EXTENSION

3.1. Promotion of Research

3.1.1. Does the institution have recognized research center/s of the affiliating University or any other agency / organization?

As there is no provision for recognising self financing engineering colleges, though affiliated to the University, as research centres, the college is not recognised as research center by Calicut University for carrying out research work.

3.1.2. Does the Institution have a research committee to monitor and address the issues of research? If so, what is its composition? Mention a few recommendations made by the committee for implementation and their impact.

Yes, there is a Research Committee to facilitate and monitor research activities. The composition of the committee is as shown below:

Sl No.	Name	Status
1	Fr. Jos Punnoliparambil, Executive Manager	Chairman
2	Dr. K.K Babu, Principal	Vice Chairman
3	Dr. Jose P Therattil, HOD ECE	Convenor
4	Er. Thomas Mathew, Administrator	Member
5	Fr. Roy V.I, MBA Project Officer	Member
6	Prof. K.C John, HOD ME	Member
7	Dr. Anitha Jacob, CE	Member
8	Dr. Usha Menon, BSH	Member
9	Dr. Baby C.B, BSH	Member
10	Dr. M. Balagopalan, BSH	Member
11	Dr. Adarsh N Gokul, Librarian	Member
12	Prof. Ratheesh, HOD, CE	Member
13	Mr. Biju C.V, ME	Member
14	Mr. VivekLukose, EC	Member

The committee encourages the staff members to prepare and submit project proposals to funding agencies like DST, KSCSTE, AICTE, etc. The committee scrutinizes and suggests suitable modification before the proposals are forwarded to the funding agencies concerned.

The committee also organizes research meetings as and when required. It also scrutinizes applications received from faculty and students for possible financial support by the college for attending National conferences and International Conferences in India and abroad.

3.1.3. What are the measures taken by the institution to facilitate the smooth progress and implementation of research schemes / projects?

Four faculty members have applied for research funding from KSCSTE, Trivandrum. The College provides adequate infrastructure and human resources. The departments have established research labs with necessary software and computing facilities to carry out research projects. The College has recruited senior faculty possessing Ph.D. degree who are competent to take up and guide research projects. Central library facilities are enhanced and updated with online national and international journals, digital library, handbooks, reference books and material related to research activity. The institute encourages the students and faculty to utilize the laboratories, library, computer centre and software for carrying out research projects and also provides facility for obtaining the necessary information and technology from external sources. The college also makes budget provisions to procure necessary equipment for experimental projects, subscribes to research journals to strengthen the library with latest journals, reference books and text books.

Any other

The college invites scientists and reputed researchers to share their experiences which enhance the research culture in the campus.

3.1.4. What are the efforts made by the institution in developing scientific temper and research culture and aptitude among students?

The college is motivating the students to do their final year projects as in house projects and industrial projects under the guidance of their department faculty.

3.1.5. Give details of the faculty involvement in active research (Guiding student research, leading Research Projects, engaged in individual / collaborative research activity, etc.

With the encouragement and motivational incentives provided by the college, a good number of faculty registered for Ph.D. Faculty are also involved actively in taking up sponsored/ collaborative projects from Kerala Government. Using the infrastructure facilities and laboratories that are equipped to the level of research labs, the faculty guide the students in their project works catering the needs of industry.

List of faculty approved as research guides

Sl. No.	Name of the Faculty	Department	University
1	Dr. K. K. Babu	Civil	Anna University
2	Dr. Usha Menon	Basic Science and Humanities	Kerala University, Madurai Kamraj University

3	Dr. M. Balagopalan	Basic Science and Humanities	CUSAT, FRI University, Calicut University
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3.1.6. Give details of workshops / training programmes / sensitization programmes conducted /organized by the institution with focus on capacity building in terms of research and imbibing research culture among the staff and students.

The college organizes Faculty development programme, interdisciplinary and department-wise workshops, training programmes and seminars focusing mainly on capacity building in terms of research and also to create research culture among staff and students. The following are the details of such activities conducted during last four years.

No. of Faculty development programme/Workshops/training programmes/sensitization programmes conducted / organized by the institution

2012-13	2013-14	2014-15	2015-16
6	7	6	2

3.1.7. Provide details of prioritised research areas and the expertise available with the institution.

All departments are strengthened with qualified and experienced faculty. Based on specialisations, research groups or individuals take up projects and publish papers in reputed journals on the research. The research areas and the respective faculty expertise are given in the table below.

Sl. No.	Research Area	Faculty	Expertise	Department
1	Civil Engineering	Dr. K. K. Babu	Geo-technical Engineering	Principal (Civil Engineering)
2	Electrical Engineering	Dr. Jose P. Therattil	Power electronics	Electronics & Communication Engineering
3	Civil Engineering	Dr. Anitha Jacob	Transportation	Civil Engineering
4	Economics	Dr. C.B Baby	Demography and Economic development	Basic Science and Humanities
5	English	Dr. Usha Menon	English language and Literature	Basic Science and Humanities
6	Chemistry	Dr. M. Balagopalan	Soil chemistry and plant nutrition	Basic Science and Humanities

7	Mathematics	Dr. K. R. Sandeep narayanan	Graph theory	Basic Science and Humanities
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3.1.8. Enumerate the efforts of the institution in attracting researchers of eminence to visit the campus and interact with teachers and students.

The institute frequently invites the eminent researchers for transfer of the information regarding research resources and industry-institute collaborative programmes to meet the industrial needs. The following members visited the college during the last 5 years.

Sl.No.	Name of the eminent researchers	Designation
1	Padmasree Prof. (Dr.) E. D. Jemmis	Emeritus Professor, IISc., Bangaluru
2	Dr. Tessa Thomas	Project Director, AGNI, Advanced Systems laboratory, Hyderabad
3	Dr. K. Radhakrishnan	Chairman, ISRO
4	Dr. K. Mohandas	Vice Chancellor, KUHAS, Thrissur
5	Dr. Kuncheria P. Issac	Vice Chancellor, APJ Abdul Kalam Technical University
6	Dr. Abdul Rahman	Pro Vice Chancellor, APJ Abdul Kalam Technical University
3	Dr. Sudeep K S	Professor, NIT Calicut
4	Dr. K. Lakshmanan	Professor, VIT University, Vellore
5	Dr. V S Vijayan	Former Chairman, Kerala State Biodiversity Board
6	Dr. L Godson	Professor, Karunya University
7	Dr. M.N. Bandyopadhyay	Director, NIT Calicut
8	Mr. Hemachandran S	Group Head, CSNG, IISU, VSSC, Trivandrum
9	Mr. R Praveen	Scientist/ Engineer SD, IISU , VSSC, Trivandrum
10	Mr. V T Sadasivan Achari	Head, Spacecraft Actuator Systems Division IISU, Trivandrum
11	Dr. MVLR. Anjaneyulu	Professor and Head, Department of Civil Engineering, NIT Calicut
12	Dr. R. Saravanan	Professor, VIT University, Vellore

13	Dr. Ajith Prabhu	Jt. Director, KSCSTE, Trivandrum
14	Dr. K. K. Seethalakshmi	Emeritus Scientist, ITRC, Mundur



Dr. K Radhakrishnan, Former Chairman, ISRO inaugurating the Graduation Programme



Dr. (Mrs.) Tessy Thomas, Project Director, AGNI, Advanced Systems Laboratory, Hyderabad inaugurating the Merit Day Celebrations



Dr. M.N. Bandyopadhyay, Director NIT Calicut inaugurating
Tech Fest "Tharang 2014"



Dr. Mohandas, Vice Chancellor, KUHAS, Thrissur inauguration
the Graduation programme 2010



Dr. K. K. Seethalakshmi, Emeritus Scientist, ITRC, Mundur
Inaugurating the Natura Club Programmes

3.1.9. What percentage of the faculty has utilized Sabbatical Leave for research activities? How has the provision contributed to improve the quality of research and imbibe research culture on the campus?

About 10% of the faculty members have utilized Sabbatical / Study / Academic leave for their activities towards research.

- ♣ The college has a policy to depute faculty to pursue their Ph.D. at reputed Universities /IITs /NITs enabling them to promote research culture in the campus.
- ♣ The institute also provides academic leave facility to the faculty who are required to attend the courses at the respective universities where they are doing their Ph.D. under external registration to fulfill the prerequisites.

The following members were deputed on Sabbatical / Academic leave

Sl. No.	Name	Branch	Institution/ University
1	Dr. Anitha Jacob	Civil Engineering	NIT, Calicut
2	Dr. Jose P. Therattil	Electrical & Electronics Engineering	IIT, Roorkee
3	Dr. R.P. Praveen	Electrical & Electronics Engineering	CUSAT
4	Mr. C. V. Biju	Mechanical Engineering	IIT, Chennai
5	Mr. Vivek Lukose	Electronics & Communication Engineering	IIT, Guwahaty

The following members are on study leave

Sl. No.	Name	Branch	Institution/ University
1	Ms. Manju Manohar	Civil Engineering	IIT, Chennai
2	Ms. Sreeja Rajesh	Computer Science & Engineering	Bharathiar University campus
3	Mr. P. Unnikrishnan	Computer Science & Engineering	NIT, Calicut
4	Mr. M. Sreekanth	Electronics & Communication Engineering	NIT, Calicut
5	Ms. Krishna Priya	Electronics & Communication Engineering	NIT, Calicut
6	Mr. Moh'd Abdul Rahman	Electronics & Communication Engineering	CUSAT
7	Ms. Swapna B Sasi	Computer Science & Engineering	Karupagam University

The following members are carrying out their research work on part-time basis.

Sl. No.	Name	Branch	Institution/ University
1	Mr. C. Muralikrishnan	Computer Science & Engineering	XLRI, Jamshedpur
2	Ms. Divya M. Menon	Computer Science & Engineering	Amritha University
3	Ms. S. Sindhu	Electronics & Communication Engineering	Amritha University
4	Ms. Shiny, M. I.	Electronics & Communication Engineering	Amritha University

The facility given by the college has contributed to improve the quality of research in the following ways

- ♣ Enhancing their knowledge levels in research activity and teaching- learning process
- ♣ Increase the number of faculty with Ph.D. qualification, the image, reputation and higher grade accreditation requirements have been enhanced.
- ♣ Facilitating the teachers to apply and get research projects from various state and central government organizations.
- ♣ Obtaining eligibility status for establishing Research Centres in various departments of the college.
- ♣ With the expertise in the areas of their specialization, the laboratories are modernized to carry out research activity.

3.1.10. Provide details of the initiatives taken up by the institution in creating awareness / advocating / transfer of relative findings of research of the institution and else where to students and community (lab to land)

- ♣ Research projects taken up by the college are mostly of national relevance
- ♣ Both postgraduate and under graduate students give preference to take up projects related to industrial and society needs.

3.2. Resource Mobilization for Research

3.2.1. What percentage of the total budget is earmarked for research? Give details of major heads of expenditure, financial allocation and actual utilization.

- About 6% of total budget is normally earmarked towards research activity every year
- The college provides budget for advance software package necessary to carry out research projects.
- Text books, reference books and hand books related to advanced topics are also added to the college library for the use to the faculty and students to carry out their research activity.
- College also provides additional budget, if required, to develop the labs and to organize seminars and faculty development programmes, etc.

3.2.2. Is there a provision in the institution to provide seed money to the faculty for research? If so, specify the amount disbursed and the percentage of the faculty that has availed the facility in the last four years?

The college provides seed money to students for presenting Technical papers in conferences.

3.2.3. What are the financial provisions made available to support student research projects by students?

- ♣ The college organizes Project exhibitions every year and prizes are given for best projects.
- ♣ The college motivates the students to do their final year projects as in house projects and industrial projects under the guidance of their department faculties.
- ♣ Internet facility is made available both in the college labs and hostel.
- ♣ Library upgradation with research journals.

3.2.4. How do the various departments / units / staff of the institute interact in undertaking inter-disciplinary research? Cite examples of successful endeavors and challenges faced in organizing inter disciplinary research.

The college encourages the departments to undertake inter-disciplinary research and to organize workshops and seminars.

3.2.5. How does the college ensure optimal use of various equipment and research facilities of the institution by its staff and students?

- Periodic updating and upgradation of the scientific equipment is made. Training is provided for lab attendants and students in the efficient handling of laboratory equipment in science departments.
- Need based repairs and maintenance of equipment is carried by technical staff appointed by College or by sending the equipment to the manufacturer.
- The college library and Information Centre facilitates a conducive research environment by subscribing the necessary national & international online journals every year, text books, reference books and other relevant research material.
- The institute has developed some laboratories as research labs by procuring research specific equipment/instruments and software. Using these lab facilities, the faculty carry out experimental work on research projects and publish the results.

3.2.6. Has the college received any special grants or finances from the industry or other beneficiary agency for developing research facility?

No

3.2.7. Enumerate the support provided to the faculty in securing research funds from various funding agencies, industry and other organisations. Provide details of ongoing and completed projects and grants received during the last four years.

- The college encourages the faculty to get research projects and provide motivational incentives by way of enhancing credentials for promotions.
- The college also provides the necessary infrastructure, space, internet along with printers for carrying out their research activities.
- The college deputed faculty to faculty development programmes, skill enhancement programmes related to research projects and also provides travel grants to publish papers at conferences in India and abroad.

3.3. Research Facilities

3.3.1. What are the research facilities available to the students and research scholars within the campus?

The following major facilities have been developed and are available in the college to facilitate research

- Internet connectivity on the campus
- Computers to all the departments

- Well equipped central library
- Subscription to e-journal and easy access
- Well equipped lab
- Seminar/ Conference Hall Library facilities.
- Text books and Reference books: 39862
- Journals / Periodicals : 87
- E-Resources : 517

3.3.2. What are the institutional strategies for planning, upgrading and creating infrastructural facilities to meet the needs of researchers especially in the new and emerging areas of research?

Recommendations are sought from the Departments on requirements for infrastructure for research, by initiating research infrastructure and specific user meetings through interaction with Heads of Departments and faculty members.

Periodic updating and upgradation of the inventory of scientific equipment is made.

The expertise of technical assistance and equipment are available to the broader research community, which includes industry, academia and private organisations.

Strategies to meet the needs of researchers:

- Allotment is given for the purchase of e-resources and print journals for research
- Management provides adequate facilities for all these laboratories
- Provision of Upgraded desktop computers in all departments
- E-resources (e-journals, e-publications, e-Books) can be accessed with desktops and laptops through intra & internet
- Uninterrupted power supplied to all departments
- The college has a general library and e-resources to cater to the needs of researchers
- Institute makes separate budget allocation every year to enhance the research facilities for procuring advanced equipment in laboratories beyond the syllabus curriculum and to procure necessary software.
- The departments conduct seminars and workshops for inculcating research culture among students and faculty.
- The college/ departments arrange guest lectures by eminent researches on emerging and new areas of research.

3.3.3. Has the institution received any special grants or finances from the industry or other beneficiary agency for developing research facilities? If 'yes', what are the instruments/facilities created during the last four years.

The staff members have submitted proposals for funding.

3.3.4. What are the research facilities made available to the students and research scholars outside the campus/other research laboratories?

The students attend internships in major companies during their summer and winter vacations.

3.3.5. Provide details on the library / information resource centre or any other facilities available specifically for the researchers?

The library has titles covering all major fields of Science and Engineering. The library is well built, spanning the ground floor with ample study space.

The Library has the following facilities for the faculty, staff and the students:

Multimedia, Internet, Reprography and a CD-ROM collection. A book bank for deserving candidates is also being maintained. The college subscribes to most of the major technical journals including IEEE, ASTM, J-GATE, and Science Direct journals.

To encourage online learning, Multimedia Computers with internet connectivity are provided for accessing e-journals. In addition to this central library, departments have its own library for the benefit of their faculty and PG students. A library committee headed by the Principal, comprising of all the Heads of Departments, and Student Representatives, meets every semester to discuss the functioning of the library. The total number of volumes, Print and Online journals, CD's are indicated as follows.

1	Text books and Reference books	--- 39860
2	Journals / Periodicals	---- 85
3	E-Resources	---- 517

3.3.6. What are the collaborative research facilities developed/ created by the research institutes in the college. For ex. Laboratories, library, instruments, computers, new technology, etc.

Every department has their own research labs in their respective field of specializations.

3.4. Research Publications and Awards

3.4.1. Highlight the major research achievements of the staff and students in terms of Patents obtained and filed (process and product):

Nil

3.4.2. Research inputs contributing to new initiatives and social development: Nil

3.4.3. Does the Institute publish or partner in publication of research journal (s)? If 'yes', indicate the composition of the editorial board, publication policies and whether such publication is listed in any international database?

No.

3.4.4. Provide details (if any) of Research Awards received by the faculty

Recognition received by the faculty from reputed professional bodies and agencies, nationally and internationally

Prof. C. Muraleekrishnan, Professor, Computer Science Dept received 'SADGURU AWARD' from Calicut University.

Prof. Rathish, S. has been awarded the best Paper Presentation award in the Indian Water Works Association

Dr. Anitha Jacob, Associate Professor, Civil Engineering Dept received Best Research Paper Award on Roads of Indian Roads Congress, New Delhi. Award was instituted by Bihar PWD.

Prof. (Dr.) M. Balagopalan has been awarded International Plant Scientist award in 2006 instituted by Academy of Plant Sciences

Prof. (Dr.) M Balagopalan is a Fellow, International Congress on Chemistry and Environment

Prof. (Dr.) M Balagopalan is a Fellow, Academy of Plant Sciences

3.4.5. Incentives given to faculty for receiving state, national and international recognitions for research contributions.

- Staff members are encouraged to attend seminars, conferences, workshops and short- term courses by providing TA/DA and registration fee.
- Faculty members are sanctioned study leave for pursuing Ph.D. and M.Tech. Programmes in premier Institutions like IITs and NITs.
- Faculty members are encouraged to take up developmental activities such as book-writing, paper publication, research projects and conducting student activities.
- All the teachers with M. Tech/ Ph.D. are encouraged to apply for financial assistance to any research funding agency (KSCSTE, AICTE etc).
- Faculty members are encouraged by giving financial support for presenting papers in conferences by sanctioning TA, DA and OD.
- Faculty members are encouraged for R & D Activities in the departments and also to acquire their Ph.D. degree.

3.5. Consultancy

3.5.1. What is the stated policy of the institution to promote consultancy? How is the available expertise advocated and publicized?

The Principal/college encourages and supports the faculty to utilize their expertise and facilities for consultancy services. Faculty members of all departments have been prompted to extend consultancy services in their field. The information regarding the available expertise in each department is communicated to various industries and establishments. This committee also arranges for the visit of the members of the faculty to the establishment to understand their nature of work. Hence, based on the requirement of the establishment, the expertise available and the interest, consultancy services are established with Industry.

3.5.2. How does the institution encourage the staff to utilize their expertise and available facilities for consultancy services?

- ♣ By reducing the work load of faculty involved in major consultancy works
- ♣ By sponsoring the faculty to attend important workshops and seminars arranged by the leading technology consultants in relevant fields.
- ♣ Providing free transport facility to faculty to make field and industrial Visits and meet the consultancy demands.
- ♣ Faculty members are permitted to utilize the infrastructure and lab facility to perform the laboratory tests and use the software for solving and analyzing their consultancy projects.

3.5.3. List the broad areas and major consultancy services provided by the institution and the revenue generated during the last four years.

Sl. No.	Name of the Department	Title	Consulting agency	Fund received
1	Civil	Compression Testing of Concrete, brick, tiles etc. Tension testing of Steel	Government departments (PWD, Irrigation etc). Private construction firms	Rs. 5286/-

3.6. Extension Activities and Institutional Social Responsibility (ISR)

3.6.1. How does the institution promote institution-neighborhood-community network and student engagement, contributing to good citizenship, service orientation and holistic development of students?

The institution has NSS, Jesus Youth, Environmental Forum (Natura), Blood donors Forum, Women Development cell and Technology Business Incubator.

3.6.2. What is the Institutional mechanism to track students' involvement in various social movements /activities which promote citizenship roles?

The college strives to instill civic responsibility in the young minds of students through extension programmes and value based courses so that they develop into sensitised, socially responsible citizens. The college offers extension programmes in addition to those supported by the University.

Students are encouraged to enroll in any one of the following

- i. National Service Scheme (NSS)
- ii. Jesus Youth
- iii. Environmental Forum (Natura) and
- iv. Blood donors Forum.

The college is incessantly organizing a number of outreach activities which relate to academic, social, cultural, community, training and international service, adventure etc., all culminating in building a healthy society contributing to our nation building. Blood Donation is one of the unsurpassed extension activities organized by the college.

3.6.3. How does the institution solicit stakeholder perception on the overall performance and quality of the institution?

- The college conducts parents meets, collects feedback from parents every year and suggestions are taken.
- The college takes exit feedback from the outgoing batch of students, analyses and take their suggestions.
- The college takes feedback from Employers every year during Placement and suggestions are taken.
- A registered Alumni association of the college has been established which helps the institution in extending their activities like delivering lectures on placement opportunities, thus contributes towards overall performance and quality of the institution.

3.6.4. How does the institution plan and organize its extension and outreach programmes? Providing the budgetary details for last four years, list the major extension and outreach programmes and their impact on the overall development of students.

The college is continuously organizing a number of extension and outreach activities which are directly connected with students academic, social, cultural, community services etc., The blood donation Cell has conducted blood donation camps, the Natura Club has carried out tree planting programmes. The expenditure for the same are generally borne by our college. Some of the salient programmes are given below.

- Conducted free Water Testing for public using water testing kit as part of Tech Fest – Tharang 12 V2
- Organised a two day training program for 2012-16 batch of civil engineering students on “Computer Aided Training Program on Practical Applications of Civil Engineering” during 9 and 10 of January 2014 as part of 'Exposure 14'.
- Conducted one day training programme for Faculty of Jyothi Engineering College on 'Application of Total Station for Geometric Data Collection' – Nov.11, 2014
- Jointly with Leica Geosystems of Trivandrum organised Three day workshop on 'Total Station Survey – Theory and Practice' – 26-28 February, 2015 – External participants from Engineering Colleges, Technical Institutes, KWA, Irrigation and Private organization.
- Provided various consultancy services to public and private sectors viz. testing of strength of construction materials, soil testing, water testing, land surveying etc.

3.6.5. How does the institution promote the participation of students and faculty in extension activities including participation in NSS, Jesus Youth, Environmental Forum (Natura), Blood donors Forum and other National / International agencies?

The institution directly takes up various extension activities. The staff and students of the institution actively participate in the respective extension activity by donating blood, planting trees, maintaining the medicinal plant garden, etc.

3.6.6. Give details on social surveys, research or extension work (if any) undertaken by the college to ensure social justice and empower students from under-privileged and vulnerable sections of society?

The college is located in a village and has taken many steps to promote college- neighborhood network. The attitude of the students of our college in serving and training the community by contributing their time, knowledge and money is well appreciated by the local community. Social surveys have been conducted by the NSS Unit of the college.

3.6.7. Reflecting on objectives and expected outcomes of the extension activities organized by the institution, comment on how they complement students’ academic learning experience and specify the values and skills inculcated.

By conducting the social welfare schemes, the students understand the responsibility of society and get prepared for the development of nation. The social activities inculcate the moral and ethical values of the students. They are able to develop leadership and organizing skills which are very useful for campus placement. In Go green activities, students were able to understand the environmental issues which in turn they practice in projects

3.6.8. How does the institution ensure the involvement of the community in its reach out activities and contribute to the community development? Detail on the initiatives of the institution that encourage community participation in its activities?

Institution maintains cordial relations with local community/leaders and make use of their services/advise in planning and conducting the community based outreach activities. The local community has participated in the development of the institution by providing the man power for various needs. The problems of the local community are identified by the college and remedial measures are identified by analyzing the problem. This is taken up as a research work by departments concerned. Hence, networking between the community and the institution helps in the development of the institution.

3.6.9. Give details on the constructive relationships forged (if any) with other institutions of the locality for working on various outreach and extension activities.

The institution has made collaborations with national organizations, Industry and academic institutions for the benefit of the staff and the students. The institution in collaboration with the local bodies and the community has contributed for the road development and hence to improved the lifestyle of the community.

3.6.10. Give details of awards received by the institution for extension activities and / contributions to the social /community development during the last four years.

The following are the outreach programmes organized by the institution.

- Conducted free Water Testing for public using water testing kit as part of Tech Fest – Tharang 12 V2 (Coordinator – Prof. M G Cyriac)
- Organised a two day training program for 2012-16 batch of civil engineering students on “Computer Aided Training Program on Practical Applications of Civil Engineering” during 9 and 10 of January 2014 as part of 'Exposure 14'.
- Conducted one day training programme for Faculty of Jyothi Engineering College on 'Application of Total Station for Geometric Data Collection' – Nov.11, 2014 (Coordinators – Dr. Anitha Jacob and Ms. Nirmala M.)
- Jointly with Leica Geosystems of Trivandrum organised Three day workshop on 'Total Station Survey – Theory and Practice' – 26-28 February, 2015 – External participants from Engineering Colleges, Technical Institutes, KWA, Irrigation and Private organization. (Coordinators – Dr. Anitha Jacob and Ms. Nirmala M.)
- Provide various consultancy services to public and private sectors viz. testing of strength of construction materials, soil testing, water testing, land surveying etc.

3.7 Collaboration

3.7.1. How does the institution collaborate and interact with research laboratories, institutes and industry for research activities. Cite examples and benefits accrued of the initiatives - collaborative research, staff exchange, sharing facilities and equipment, research scholarships etc.

Sl. No.	Name of the Department	Organization	Nature of Collaboration
1	Computer Science and Engineering	Cosmic Micro Power Solutions	Firmware and Software Support

The college has initiated actions for collaborative works with research institutes.

Benefits:

It is expected that with collaboration, there will be

- ♣ Improved Teaching Learning Environment benefited with these programmes
- ♣ Industry oriented B.Tech and M.Tech projects
- ♣ Improved R&D and consultancy activities
- ♣ Improved Placement & Training activities
- ♣ Exposure to students on practical and Industrial aspects through Industrial tours.

3.7.2. Provide details on the MoUs/ Collaborative arrangements (if any) with institutions of national importance/ other Universities/ industries / Corporate (Corporate entities) etc. and how they have contributed to the development of the institution.

The various department of the college have undertaken Collaborative arrangements/ works with different organizations. Some of them are depicted here. The detailed lists are in the Evaluation Report of various departments.

Sl. No.	Name of the Department	Organization	Nature of Collaboration
1	Electrical and Electronics Engineering	Hykon, Thrissur	For 10 years w.e.f 10/6/14
2	Electrical and Electronics Engineering	Entuple Technologies, Bangalore	For 2 years w.e.f 01/08/2014
3	Electronics and Communication Engineering	Ace components & electrical ltd, Mysore, Karnataka	Industrial Visit & Industrial training

4	Electronics and Communication Engineering	CEDICOM, Shoranur, Palakkad	Technical Workshop for students
5	Electronics and Communication Engineering	Ace components & electrical ltd, Edapally, Kochy.	Industrial Visit & Industrial training, Employment to students
6	Electronics and Communication Engineering	Spinner Group of Companies, Peringadoor. P.O, Thrissur, Kerala	Technical Talk and Industrial Visit
7	Computer Science and Engineering	Cosmic Micro Power Solutions	Firmware and Software Support

3.7.3. Give details (if any) on the industry-institution-community interactions that have contributed to the establishment/ creation / up-gradation of academic facilities, student and staff support, infrastructure facilities of the institution viz. laboratories / library/ new technology /placement services, etc.

- ♣ Industry-Institute Community interactions by inviting scientists and industrialists to deliver guest lectures and to organize workshops and seminars helped the institution in so many ways.
- ♣ Faculty and students are trained to meet the technological needs of industry and society.
- ♣ Laboratories are upgraded with advanced equipment with the amounts allotted through institute budgets
- ♣ Awareness on importance of collaborative research projects and live projects for students is created by inviting eminent scientists and industrial personnel
- ♣ Both faculty and students are benefited by organizing Industry oriented workshops where in they gain hands-on experience and industrial exposure.

3.7.4. Highlighting the names of eminent scientists / participants who contributed to the events, provide details of national and international conferences organized by the college during the last four years.

The faculty members periodically participate in short term courses and workshops / training programmes organized by this college and also organized by other institutes to enrich their technical knowledge and skills. The various departments conducted several workshops / Faculty Development Programmes / Training Programmes on the latest technologies and software for the benefit of the faculty. The following are the details of workshops / Faculty Development Programmes / Training Programmes organized by the various departments of the college during the last five years.

Workshops/ Faculty Development Programmes / Training Programmes organized during the last four years.

Activity	2012-13	2013-14	2014-15	2015-16
Workshops/ Faculty Development Programmes / Training Programmes	6	7	6	2

3.7.5. How many of the linkages / collaborations have actually resulted in formal MoUs and agreements? List out the activities and beneficiaries and cite examples (if any) of the established linkages that enhanced and/or facilitated-

- a. Internship/On-the-job training Collaboration with various industries provides an opportunity to the students for industry exposure, acquiring training skills for placements and getting projects from industries.
- b. Summer placement Collaboration with various industries /organizations helps the students to undergo shortterm training and internship programmes during summer vacation period and semester break period.
- c. Professional development
- d. Institute arranges workshops, seminars and conferences at department and inter- department levels to exchange the ongoing research activity in the fields of national importance and industry needs.
- e. Institute also deputed faculty to exchange their research expertise at workshops, conferences and training programs arranged at other colleges/organizations.
- f. College also arranges frequently faculty development programmes inviting resource persons from other reputed Academic institutions

Research

- a. College encourages the faculty to take up research projects offered by AICTE, KSCSTE and other State and Central Government organizations.
- b. College is also extending incentives to the faculty who publish papers in journals and conferences.

Consultancy

The college encourages the faculty to take up consultancy works and to extend services catering to the needs of the society and industry/companies.

Extension

The following are some of the extension services taken up by the college providing job market information and related inputs to students

- ♣ Pre-placement training
- ♣ Personality Development Programmes and frequent Assessment Tests in Aptitude, Reasoning and Verbal.
- ♣ The Placement details during last 4 years

Placement details	2009	2010	2011	2012	2013	2014
No. of students	113	78	81	137	19	74
Percentage	38	22	22	43	6.2	20

j. **Twinning programmes:** Nil

k. Introduction of new courses keeping in view the needs of the society and industry/ company the following new courses/increase in intake are introduced during last 4 years.

Year	2011	2012	2013	2014
New courses introduced	Additional Batch for B. Tech. Mechanical Engineering and Electronics and Communication Engineering	B.Tech. Civil Engineering M. Tech. Power Electronics M. Tech. Computer Science and Engineering	Additional Batch for B. Tech. Computer Science and Engineering	Nil
Increase in intake	126	99	63	

Student exchange

- Students are deputed to industries/research organizations during summer vacation for industry exposure and to take up the projects related to industry needs.
- Experts from industry and research organizations are invited for interactive sessions with students for exchange of knowledge and practical skills making the students fit for industry requirements.
- The departments organize state-wise and inter collegiate festivals, seminars and technical paper contests and students from various institutions exchange their ideas in thrust areas of engineering and other fields.
- The institution arranges industrial tours to the students every year to expose them to the practical aspects of industry and to fill the gap between theory and practical applications which enhance the exposure to real working environment.

m. Any other Nil

3.7.6. Details on the systemic efforts of the institution in planning, establishing and implementing the initiatives of the linkages / collaborations.

- The Institution has a Research and Development Committee. The functions and outcome impact are presented in Criterion-III, Item No.3.1.2.
- The Institution provides budget for in-house R& D every year.
- Institution provides seed money to undertake industry oriented student projects and in-house R& D projects by faculty.
- Work load will be reduced to senior faculty who involve in major R& D Projects and consultancy.
- Faculty will be sponsored regularly to attend important workshops and seminars arranged by leading research organizations.
- Faculty members publish papers in reputed journals and the college sponsors them to present papers at Conferences/Symposiums at National and International level.

CRITERION – IV

**INFRASTRUCTURE AND
LEARNING RESOURCES**

CRITERION IV

INFRASTRUCTURE AND LEARNING RESOURCES

4.1 Physical Facilities

4.1.1. What is the policy of the Institution for creation and enhancement of infrastructure that facilitate effective teaching and learning?

The institution follows the policy of creating and enhancing the infrastructure that facilitates effective teaching and learning in proportion to the student strength in different streams. The policy also conforms to the strength of the staff appointed for the institution. The institution has a Strategic Planning Committee that recommends the need for creating and enhancing the infrastructure to ensure effective teaching and learning. The planning committee meets once every year at the beginning of the academic session, analyses the student strength in various streams, projects the expected strength in the next academic year, starting of new courses etc., It also considers the suggestions received from the Departmental Advisory Committee. After detailed discussions and deliberations, the planning committee puts forth its recommendations for infrastructure expansion. The recommendations of the planning committee are implemented, after approval by the Governing Body of the College. The implementation is done in a phased manner as per the Budget allotted by the Management for the infrastructural development.

4.1.2. Detail the facilities available for a) Curricular and co-curricular activities – class rooms, technology enabled learning spaces, seminar halls, tutorial spaces, laboratories, botanical garden, Animal house, specialized facilities and equipment for teaching, learning and research etc.

All the departments are fully equipped with the necessary infrastructure to meet the ever increasing requirements with adequate class rooms, seminar halls, tutorial halls, laboratories and sufficient space for hosting all academic activities, as shown below. The details of the facilities available are indicated in the profile provided by each department. The college has an Administrative Block, Examination Cell, Central Library, Computer Centre, Department Libraries, Spacious and well ventilated and furnished class rooms, Seminar Hall exclusively for each department, Conference Halls, Auditorium, Staff rooms, Well equipped laboratories, Workshops, Spacious drawing halls, Separate Hostels for boys and girls.

To cater to the needs of the faculty and students, a fleet of 20 buses, a canteen & Cafeteria, a post office (Nearby College), Federal Bank Extension Centre, and a stationery shop are provided within the campus. The Institution has a built up area 35,621 sq.m on its sprawling green campus.

A. Infrastructure Facilities for Academic Activities

Sl.No	Details	Required Number as per AICTE	Available Numbers	Required Area, sq. m	Available Area, sq. m
1	Class rooms	32	37	2112	2941
2	Labs	50	55	3300	4608
3	Drawing Hall	1	2	132	306
4	Seminar Hall	5	7	660	861
5	Tutorial Hall	8	8	264	378
6	Workshops	6	6	200	594
7	Computer Centre	1	1	150	173
8	Library	1	1	300	792
9	Auditorium	1	1	400	711
	TOTAL AREA			7518	11,364

Infrastructure Facilities

Sl. No	Details	Required Number as per AICTE	Available Numbers	Required Area, sq. m	Available Area, sq. m
1	Principals Room	1	1	30	47
2	Board Room	1	1	20	53
3	Adm Office Room	1	1	300	323
4	Dept Office	6	6	120	97
5	HODs Room	6	6	60	60
6	Staff Rooms As reqd	110	120	600	1120
7	Central Store	1	4	30	117
8	Maintenance	1	1	10	61
9	Security	1	1	10	19
10	House Keeping	1	1	10	16
11	Pantry for Staff	1	1	10	61
12	Examination	1	2	30	66
13	Placement Office	1	1	30	33
	TOTAL AREA			1260	2073

Infrastructure Facilities

Sl.No	Details	Number	Required Area, sq. m	Available Area, sq. m
1	Toilets Ladies & Gents	10	350	570
2	Boys Common Room Girls Common Room	2	100	195
3	Cafeteria	3	150	315
4	Stationary Stores / Reprographic Facilities	2	10	17
5	First Aid / Sick Room	2	10	61
6	Gymnasium & Sports Club	2	200	246
7	Boys Hostel (300 students)	1	adequate	5317
8	Girls Hostel (300 students)	1	adequate	7057
	TOTAL AREA		820 + adequate area for hostels	13,778

S.No	Details	Required Area, sq. m	Available Area, sq. m
1	Circulation Area	2400*	3760*

*excluding area for hostels

Sl.No	Details	Required Area, sq. m	Available Area, sq. m
1	Academic Area	7518	11,364
2	Administrative Area	1260	2073
3	Amenities Area	820 + adequate area for hostels	13,778
4	Circulation Area	2400	3760
	TOTAL AREA	11998	30975

Central library with more than 792 Sq m is available with the following facilities:

Sl.No	Particulars	Available
1	No. of volumes UG and P.G.	32494
2	No. of Titles UG PG	11097
3	Ref. Books	7368
4	International journals	Online Journal Packages; IEEE ASPP+POP = 169 Elsevier = 275 ASTM = 8 ASME = 29

		ASCE = 36 Total = 517 Print Journals- 4 1)International Journal of Advances in Embedded System Research 2) International Journal of Applied Research on Information Technology and Computing 3) International Journal of Data Mining and Emerging Technologies 4) International Journal of Image Processing and Applications.
5	National journals UG and PG	58
6	Educational CDs	1821
7	Magazines	25
8	Back Volumes	507
9	On-line Resources	Online Journal Packages; IEEE ASPP+POP = 169 Elsevier = 275 ASTM = 8 ASME = 29 ASCE = 36 Total = 517 DELNET and NPTEL E-Books from Wiley Subscription Services- 25
10	Reading Room Capacity	160
11	Multimedia / Internet etc.,	Yes.

Each department has adequate number of class rooms equipped with facilities including LCD projector, audio system, Computer, UPS and other accessories. Each department has well furnished seminar halls. All the departments have established departmental Library with relevant books and Journals. Well equipped central library with access to more than 517 e-journals. There are two hostels separate for girls and boys with a built up area of 12,374 sq.m.

Vehicle Parking

Ample space –Two wheeler and four wheeler parking

Canteen

Canteen facility is available for students and staff.

Telephone

Telephone facility is available for students in the hostel and the college.

Internet Café

Internet facility in the central computer common for students and staff

Wi-Fi enabled campus

The entire campus is wi-fi enabled (including hostels) with 20 Mbps internet leased line.

Transport

The college provides more than adequate transport facilities from various parts of the city using its own fleet of buses numbering about 28. In addition, the college is well connected with the city by buses.

Common Room for students

Separate common rooms are available for male and female students.

Rest Rooms

There are rest rooms available in each floor for students and staff.

Drinking Water

Water coolers are located at strategic points on all the floors of the college.

All weather approach roads connecting all the blocks.

DTP and topographic facilities are available within the campus.

Infrastructure Facilities for Co-curricular activities

The college has a staff club to promote the oratory and linguistic skills of the students.

Co-Curricular activities under the aegis of departmental professional societies are held in various seminar halls provided in each department.

Transport facilities are provided for students to participate in inter college cultural festivals.

b) Extra-curricular activities

Sports, outdoor and indoor games, gymnasium, auditorium, cultural activities, Photography/Film making, Painting and Drawing, Literary Club, Craft making, Gardening and agriculture, GATE/MAT/GMAT/CAT coaching, Civil Services Club, Communication Workshop, Public Speaking/GD/Debate, Remedial Classes/Peer Coaching/Special Tuition, Library/Laboratory, Add on course, health and hygiene etc.

Extra-curricular activities and sports

Separate sports area available for indoor and outdoor games. Coaching offered for Indoor games like badminton, table tennis etc., Outdoor games like cricket and foot ball are the most prominent.

A fully equipped Gymnasium is available in the hostel to help students maintain their fitness.

An indoor auditorium with a seating capacity of 1000 is available to host literary and cultural activities.

Qualified and efficient Lecturer in Physical Education .

Expert coaching in specialized games and sports.

In addition to the above, the College has a Cultural Club which provides students with facilities to pursue different activities like music, drama, photography and literary activities. There are different societies to support these activities. The equipment to support these activities includes musical instruments, audio system, digital camera, handy cam, etc.

Two dedicated labs for communication skill development with adequate systems and software.

Coaching classes for GATE/MAT/GMAT/CAT coaching, Civil Services Club, Communication Workshop, Public Speaking/GD/Debate,

A fully fledged state of the art T & P Cell is actively working and arranging on-campus placements and training to the students.

Besides providing internet connectivity through LAN to all the departments, computer centre has 16 mbps internet facility.

For the uninterrupted academic activity, two stand by Generators of 250 KVA and 62.5 KVA Generators as back up Power supply and to tap Non-Conventional Energy Source, a 50 KW Solar Power Plant is installed.

Health Centre

The college has a tie up with a multi speciality Hospital (Jeevodaya Hospital, Chelakkara) situated within 8 km, Jubilee Mission Medical College & Research Institute, Thrissur and Trichur Institute of Mental Health and Neuro Sciences, Thrissur. Copies of the MoU attached.

4.1.3. How does the institution plan and ensure that the available infrastructure is in line with its academic growth and is optimally utilized? Give specific examples of the facilities developed/augmented and the amount spent during the last four years (Enclose the Master Plan of the Institution/ campus and indicate the existing physical infrastructure and the future planned expansions if any).

Since its inception in 2002, the college has been keeping pace with the changing needs and requirements to meet its academic growth. To keep pace with the needs and requirements, additional infrastructure is being

added from time to time. In the last four years, many buildings have been constructed/ renovated. The details of the facilities which have been added are as under:

Sl. No	Infrastructure facilities	Addition	Amount spent (in Rs)
1	Rain water harvesting	Pond	50 lakhs
2	Canteen	Coffee shop	1.00 lakh
3	Building	Civil Dept.	15.00 lakh
4	Laboratory	Environmental, Language and CADD	42 lakhs
5	Toilets	Physically handicapped toilets (Boys and Girls)	2.0 lakhs

4.1.4. How does the institution ensure that the infrastructure facilities meet the requirements of students with physical disabilities?

The College has already taken steps to facilitate easy access of differently-abled students in the ground floor classrooms, library, canteen and drinking water facilities, augmented with lift adjacent to the steps at the ground floor.

4.1.5. Give details on the residential facility and various provisions available within them:

Hostel Facility:

The college has separate hostel facilities for boys and girls

- a. Capacity of the hostels (to be given separately for boys and Girls)

Capacity of the boys hostel is 329

Capacity of the girls hostel is 412

- b. Occupancy

Occupancy of the boys hostel is 243

Occupancy of the girls hostel is 222

- c. Rooms in the hostel (to be given separately for boys and Girls)

There are

147 rooms in the boys hostel and

182 rooms in the girls hostel.

- d. Recreational facilities

Television with cable connection facility in each hostel.

Sports and Games (Indoor and Outdoor facilities)

The hostel has provision for the following 1. Cricket 2. Volley ball 3. Field events
4. Badminton 5. Table Tennis 6. Carom 7. Chess 8. Skipping ropes

The hostel also has a Fitness Centre for use by the students and staff.

Computer facility including access to internet in hostel

e. WI-FI enabled Facilities

The college has a tie up with a multi speciality Hospital (Jeevodaya Hospital, Chelakkara) situated within 8 km, Jubilee Mission Medical College & Research Institute, Thrissur and Trichur Institute of Mental Health and Neuro Sciences, Thrissur. Copies of the MoU attached.

Recreational facility - Common room with audio-visual equipments

Constant supply of safe drinking water 24 hours

4.1.6. What are the provisions made available to students and staff in terms of health care on the campus and off the campus?

The college has a tie up with a multi speciality Hospital (Jeevodaya Hospital, Chelakkara) situated within 8 km, Jubilee Mission Medical College & Research Institute, Thrissur and Trichur Institute of Mental Health and Neuro Sciences, Thrissur. Copies of the MoU attached.

4.1.7 Give details of the Common Facilities available on the campus – spaces for special units like IQAC, Grievance Redressal unit, Womens Cell, Counseling and Career Guidance, Placement Unit, Health Centre, Canteen, Recreational spaces for staff and students, safe drinking water facility, auditorium, etc.

Placement Cell: Available

Health Centre: The College has a tie up with local hospitals for emergency treatment

Canteen: Available

Cafeteria: Available

Recreation facilities: Available

Drinking water facility: RO plant with 1000 Ltrs per hour available

Auditorium: Available.

Security: Available

Redressal unit: Available

WomensCell : Available

Counseling and Career Guidance : Available

4.2. Library as a Learning Resource

4.2.1 Does the library have an Advisory Committee? Specify the composition of such a committee. What significant initiatives have been implemented by the committee to render the library, student/user friendly?

Yes.

The Library Advisory Committee consists of

1. Fr. Jos Punnoliparambil, Executive Manager - Advisor
2. Dr. K.K Babu, Principal - Chairman
3. Dr. Adarsh N Gokul, Librarian - Convenor
4. Er. Thomas Mathew, Administrator - Member
5. Fr. Joju Chiriyankandath, Finance Manager - Member
6. All HODs - Member
7. PG Student Representative - Member
8. College Union General Secretary - Member

It is advisory in nature with regard to general updating, maintenance, purchase of books, journals, periodicals, etc. The Heads of the Departments recommend for the annual purchase of subject books. The Library receives requisitions from Departments for new books. Faculty members also suggest other acquisitions and all these are discussed in meetings of the Library Advisory Committee which recommends acquisition list of newly procured books are displayed for the users.

Periodical checking and maintenance are carried out as per recommendations of the library advisory committee. The major responsibilities of the Committee are to

1. Guide all Library acquisitions.
2. Monitor the students use of the library facilities and suggest measures to make the library services more user – friendly and easy accessible.
3. Ensure proper maintenance of all library facilities.
4. Discuss and place its views on any library related matter as required by the management.

4.2.2 Provide details of the following:

Total area of the library (in Sq. Mts.) : 768 sq. m

Total seating capacity : 160

Working hours (on working days, on holidays, before examination days, during examination days, during vacation)

on working days : 9.00 A.M. to 7.00 P.M.

on weekend : 9.00 A.M. to 5.00 P.M.

on before examination days : 9.00 A.M. to 7.30 P.M.

during examination days : 9.00 A.M. to 7.30 P.M.

during vacation : 9.00 A.M. to 5.00 P.M.

4.2.3 How does the library ensure purchase and use of current titles, print and e-journals and other reading materials? Specify the amount spent on procuring new books, journals and e-resources during the last four years.

The College Library follows Open Access System. Books are classified according to DDC and are arranged on rack. The status of a book can be identified by searching Online Public Access Catalogue (OPAC) in the campus book software. A good collection of reference books are also available in the library along with Newspapers and Periodicals. UG and PG students can borrow 4 and 6 books, respectively from the Library. The books are given on lend for a period of 14 days which can be renewed further. The faculty members can borrow 8 books which are given on lend for a period of 3 months. The books are barcoded which is printed using Argox Printer having Argobar Pro Software. The smartcard of the readers and Barcode in the books are scanned simultaneously and the books can be issued/returned/renewed through Campus Book Software. A Property Counter is available for library users. Stock verification is usually carried out during summer vacation.

Library holdings	2014-15		2013-14		2012-13		2011-12	
	Nos	Total cost	Nos	Total cost	Nos	Total cost	Nos	Total cost
Text books Reference Books	7577	674828*	2919	857021	2850	906004	1862	429935.05
Journals/ Periodicals	73	198371	38	770007	44	74778	22	38,241
e-resources	IEEE ASPP+POP combo package – 169 Elsevier Engg + Comp. Sc – 275 ASTM Digital Library – 8 ASCE – 36 ASME– 29 Total = 517 Total cost 15,94,890 DELNET Membership	IEEE ASPP - 161 Proceedings Order Plan (POP) Elsevier Engg + Comp. Sc – 275 Total = 436 Total cost 12,80,894	IEEE ASPP - 152 Elsevier Engg + Comp. Sc – 275 ASME – 26 Total= 453 Total cost 8,30,861 DELNET Membership Fee### Total cost 11,500	Elsevier Engineering & Computer Science Package -275 J-Gate Engineering & Technology (JET) McGraw Hill Access Engineering Library-362 Springer Electrical, Electronics and Computer				

** Some of the periodicals which are coming every year for which payment was given for five or three years together are included in that financial year only.

Payment for Delnet for the year 2012-13 given in the financial year 2011-12 since DD. No. 611156 was taken on 08-03-2012.

Payment for Delnet for the year 2011-12 given in the financial year 2011-12 since DD. No. 611013 was taken on 07-06-2011

Books in central library

S.No	Particulars	Available details
1	No. of volumes	32494
2	No. of Titles	11097
3	Ref. Books	7368
4	International Journals	<p>Online Journal Packages; IEEE ASPP+POP = 169 Elsevier = 275 ASTM = 8 ASME = 29 ASCE = 36 Total = 517</p> <p>Print Journals- 4 1)International Journal of Advances in Embedded System Research 2) International Journal of Applied Research on Information Technology and Computing 3) International Journal of Data Mining and Emerging Technologies 4) International Journal of Image Processing and Applications.</p>
5	National journals	58
6	Educational CDs	1821
7	Magazines	25
8	Back Volumes	507
9	On-line Resources	<p>Online Journal Packages; IEEE ASPP+POP = 169 Elsevier = 275 ASTM = 8 ASME = 29 ASCE = 36 Total = 517 DELNET and NPTEL E-Books from Wiley Subscription Services-25</p>
10	Reading Room Capacity	160
11	Multimedia/ Internet etc.	Yes.

4.2.4 Provide details on the ICT and other tools deployed to provide maximum access to the library collection?

The Library has the following ICT facilities enabled reading hall.

Computers for internet browsing and digital library for more than 1% of the student population i.e. 36 computers with multimedia are available in the digital library.

Digital library with 1821 CD ROMs.

Dedicated Internet facilities with 16 Mbps bandwidth.

About 542 + e-journals, e-books and reports.

36 computers for D Space Software and online jobs

In-house/remote access to e-publications

Automated Library

02 computer systems for searching OPAC

Total numbers of printers for public access : 01 printer

Institutional Repository : JEC Library Institutional Repository developed using D Space 1.70. mainly used for uploading question papers.

4.2.5 Provide details on the following items:

Average number of walk-ins : 140 per day

Average number of books issued/returned : 50-130

Ratio of library books to students enrolled : 17.488 books per student

Average number of books added during last 3 years : 4282

Average number of login to OPAC : 70 per day

Average number of login to e-resources : 65

Average number of e-resources downloaded/printed : 60

Number of information literacy trainings organized : 04

Details of “weeding out” of books and other materials : 0.2%

4.2.6 Give details of the specialized services provided by the library

Reference : The Library has a separate reference section in which 7368 books are available. These books are given on lend after 6.00 pm for overnight use and have to be returned the book next day at 9.00 am itself.

Reprography : Reprography facility is available in the library for the benefit of the faculty and students. We have outsourced the photocopying facility and a register is kept in the library for the record of books taken for photocopying. However, photocopying of books is not encouraged as an ethical practice.

ILL (Inter Library Loan Service): The Library has membership in DELNET which is offering inter library loan and document delivery services. The faculty and students benefit from this.

Information deployment and notification : Available.

A notice board at the entrance of the library displays all the important and latest notifications and whenever necessary the information is also hosted on the institution website.

Download: Available

Printing : Available

Reading list/ Bibliography compilation : Available

In-house/remote access to e-resources : In-house access available

User Orientation and awareness : Every faculty is trained by a library official on the recent methods of collection of literature by e-sources pertaining to their topics.

Assistance in searching Databases: Available

INFLIBNET/IUC facilities: DELNET facility available

4.2.7 Enumerate on the support provided by the Library staff to the students and teachers of the college.

Yes.

The library staff assist the staff and students for accessing books and e-journals in case of difficulty. Also, to facilitate the ease of access, the library staff ensure that arrangements are made to display new arrivals in a special rack and the list of books on the notice board at the entrance. The new books are kept for 07 days as a display. Catalogue of new arrival is circulated to all departments and students. Publishers are invited to display their books, journals etc., once in a month. Faculties and students are encouraged to recommend good books.

4.2.8 What are the special facilities offered by the library to the visually/physically challenged persons? Give details.

Although the general norm for borrowing / returning of books is that the books should be borrowed/ returned only by the concerned person, in case of differently abled students and faculty, their physical presence for getting / returning the books is not insisted.

4.2.9 Does the library get the feedback from its users? If yes, how is it analysed and used for improving the library services. (What strategies are deployed by the Library to collect feedback from users? How is the feedback analysed and used for further improvement of the library services?)

Yes. Important suggestions given in the students feedback are discussed with the library staff and are facilitated as per the feasibility. A complaint box is provided at the library, in which the

students/ faculty may drop complaints or suggestions. Any such complaint/ suggestion received, is addressed by Librarian immediately and informed to the Principal. If necessary, the Library Committee is informed about it and suitable action is recommended by the committee.

4.3 IT Infrastructure

4.3.1. Give details on the computing facility available (hardware and software) at the institution.

The details are provided herewith

1. HP Compaq DX 2480 - 50 Nos. Processor : Core 2 Duo HDD : 320 GB RAM : 2 GB
Monitor : 15.6" TFT wide LCD Key board : Multimedia Mouse : Optical
2. HP Elite - 7100 MT : 50 Nos. Processor : Intel Core i3 540 HDD : 320 GB RAM : 2 GB
Monitor : 18.5" TFT wide LCD Key board : Multimedia Mouse : Optical
3. Acer Veriton M200 - H61 – 50 Nos. Processor : Intel Core i3 3220 HDD : 500 GB
RAM : 4 GB Monitor : 18.5" TFT wide LCD Key board : Multimedia Mouse :
Optical
4. Lenovo Think Centre M 72 : 80 Nos. Processor : Intel Pentium i3 3120 HDD : 500 GB
RAM : 4 GB DDR3 Monitor : 18.5" TFT wide LCD Key board : Multimedia Mouse :
Optical
5. Lenovo Think Centre Edge 72 – 60 Nos. Processor : Intel Pentium Core i3 3220 HDD :
500 GB RAM : 4 GB Monitor : 18.5" TFT wide LCD Key board : Multimedia Mouse :
Optical
6. Acre Core i3 : 35 Nos. Processor : Intel Core i3 3220GHz HDD : 500 GB RAM : 4 GB
Monitor : 18.5" TFT wide LCD Key board : Multimedia Mouse : Optical
7. Aver Veriton : 50 Nos. Processor : Intel Core i3 3220GHz HDD : 500 GB RAM : 4 GB
Monitor : 18.5" TFT wide LCD Key board : Multimedia Mouse : Optical
8. Dell Upgraded : 50 Nos. Processor : Intel Dual Core 2030 – 3GHz Processor HDD : 80
GB RAM : 4 GB Monitor : 15.6" LCD Key board : Multimedia Mouse : Optical
9. Assembled PCs : 100 Nos. . Processor : Intel Dual Core 2030 – 3GHz Processor HDD :
500 GB RAM : 4 GB Monitor : 15.6" LCD Key board : Multimedia Mouse : Optical

Servers :

Sun X4150 Blade Server 4 Nos. Intel Xeon E 5410 Quad Core Processor, RAM : 8 GB, 146x2
SAS HDD, 1 GBPSx4 Ethernet port

3 TB Storage- SUN NW 2530 – 1 No.

HP DL 380 p Gen 8 E5 – 2650V Server : 1 No. (64 GB RAM, 300GB x2 SAS) USB Keyboard,
Mouse, 18.5" LCD Monitor, 1 GBPSx4 Ethernet port)

External Storage : 9 TB

Printers / Scanners :

Printers

1. Dot matrix : 7 Nos.
2. Inkjet : 5 Nos.
3. Laser jet : 46 Nos.

Scanners : 2 Nos.

LAN Facility : Structured Cabling, Star topology with CAT 6 UTP Cables. It provides 1000Mbps wired connectivity. Class C IP Address with super netting.

Firewall : Watch Guard XTM 515

List of Licensed Software :

System Software : 18 Nos. Windows Server Enterprise 2008, Windows Server Standard 2008, Windows Server Datacentre 2003 R2, Windows Server Enterprise 2003 R2, Windows Server Web Edition 2003, Windows Web Server 2008, Windows HPC Server 2008, Windows Computer Cluster Server 2003, Windows Vista Business with Service Pack 1, Windows VECD with Service Pack 1, Windows 7 Professional with Service Pack 3, Microsoft Campus Agreement MSDN subscription Windows Server 2008 (Agreement No. V3623613), Windows Server Web Edition 2008, Windows HPC Server OS, Windows HPC Server OS With Hyper V2008, Windows Compute Cluster Server 2003 W/SP1, Windows Computer Cluster 2003 W/SP2, HPC Pack 2008, RHEL Server Standard.

Application Software : 46 Nos. Ms Office 2007, Office Professional 2003, Adobe Web Bundle, Visio Professional 2007, Project Professional 2007, Ms Visual Studio Professional 2005, Ms Visual Foxpro 9.0, Borland C, Expression Blend 2.0, Expression Design 2.0, Expression Encoder 2.0, Expression Media, Expression Studio 2.0, Expression Web 2.0, Microsoft ESP Client, MSDN Library, MS Project Professional 2003, Ms Exchange Server 2007/SP1, MS Commerce Server 2000, MS Content Management Server, MS BizTalk Server 2009, Ms BizTalk Server Enterprise Edition 2008, SQL Server Enterprise Edition 2008, SQL Server Standard Edition 2008, Atigen Enterprise Manager 9.0, BizTalk Server Branch 2009, BizTalk Server Enterprise 2009, BizTalk Server Standard 2009, Commerce Server Enterprise 2009, Exchange Server 2003 Enterprise Edition, Internet Security and Acceleration Server 2006 Enterprise Edition, ISA Server 2006 Service Pack 1 (Standard and Enterprise Edition), Management Reporter 2007, Messaging Security Suite 9.0, Office Forms Server 2007 W/SP1, Officer Server Language Pack 2007, Project Server 2007 with SP1, Connected Services Framework Server, Orcad, Mat Lab, Pro-Engineer Wild Fire 3, Ansys, Stadd V8i, Orell Digital Language Lab, Primavera, ETAB, SAP, Fedora 12, Mozilla Fire fox Java Kit (Sun_java_Sdk, JDK) Tomcat server WekaEclips Net beans Winrar, Adobe Reader, Flash player, Putty Xylinks.

List of Free Ware software Number of nodes/computers with Internet Facility : 525.

All computer labs have been provided with UPS facility.

Detail on the computer and internet facility made available to the faculty and students on the campus and off –campus ?

16 Mbps Internet Connectivity from Asianet&10 Mbps Connectivity from BSNL is provided for students & Staff fail-over bandwidth connection from BSNL under NMEICT project. The entire campus is wifi enabled and faculty / students who wish to access the facility can do so with prior permission.

4.3.3 What are the institutional plans and strategies for deploying and upgrading the IT infrastructure and associated facilities?

Provided e- class rooms

Provided more advanced software for Research and Development.

4.3.4 Provide details on the provision made in the annual budget for procurement, upgradation, deployment and maintenance of the computers and their accessories in the institution (Year wise for last four years)

Computer upgradation is a regular process and 30% of the computers are replaced every year. Thus, all the computers are replaced by the end of 3 years. For the last 5 years, an amount of Rs. 1,25,69,100/- was spent towards upgrading and maintenance of the computer systems. The college has a separate service unit with qualified engineer and technicians to maintain 100% uptime of all computers in the campus. In addition to it the suppliers are required to maintain the computers under AMC.

Academic Year	Maintenance	Upgradation
2011-12	3,86,622	14,49,400
2012-13	8,22,522	21,54,600
2013-14	4,70,063	41,91,250
2014-15	7,74,643	23,20,000
Total	24,53,850	1,01,15,250

4.3.5 How does the institution facilitate extensive use of ICT resources including development and use of computer-aided teaching/ learning materials by its staff and students?

College is providing on line NPTEL video material. Faculty are encouraged to use computers in class rooms for power point presentations and for preparing lesson plans and learning materials. Smart class rooms with LCD projectors, interactive boards, OHP and computers are available. College is conducting Subject Expert webinars. Staff rooms are facilitated with computers and Internet. College is maintaining a data base of objective questions of all courses and used for conducting online examinations. Students can check his level in each course. The calendar of college events is displayed on the college web site.

4.3.6 Elaborate giving suitable examples on how the learning activities and technologies deployed (access to on-line teaching - learning resources, independent learning, ICT enabled classrooms/learning spaces etc.) by the institution place the student at the centre of teaching-learning process and render the role of a facilitator for the teacher.

Providing on line NPTEL video material for students

Conducting Subject Expert webinars on different subjects like Data Mining, data Communication and others.

The course material is also available in Digital library

Students can access from any systems in the college campus

College is also having membership in CSI, Cochin chapter

Establishment of Microsoft innovation centre

Providing IBM tools and materials, through which students can learn and appear of certification.

Using these tools they can develop projects and deploy in contest.

4.3.7 Does the Institution avail of the National Knowledge Network connectivity directly or through the affiliating university? If so, what are the services availed of?

No.

4.4 Maintance of Campus Facilities

4.4.1 How does the institution ensure optimal allocation and utilization of the available financial resources for maintenance and upkeep of the following facilities (substantiate your statements by providing details of budget allocated during last four years)?

Description	CFY (2013-14)	CFY (2012-13)	CFY (2011-12)	CFY (2010-11)
a. Building	200304	1356306	14081204	5873538
b. Furniture	682805	2188214	3663602	2504599
c. Equipment	1556001	1993873	506109	2540354
d. Computers	2681859	7946180	2337927	2193616
e. Vehicles	1014323	-	1028070	646220
f. Potable water facility	50,000	-	-	-

4.4.2 What are the institutional mechanisms for maintenance and upkeep of the infrastructure, facilities and equipment of the college?

There is a Project and Engineering Cell, and is under the charge of a Project Engineer. There is also a Purchase committee, constituted for the purchase of equipments, stationery, etc. and to monitor the maintenance of academic infrastructure and facilities.

Funtions of the cell

Proper upkeep and maintenance of the buildings.

Maintenance of the garden and surroundings.

Maintenance of all equipment including Diesel Generators

Carrying out minor repairs of furniture, electrical and sanitary fittings.

Maintenance of the roads, water tanks and other services in the compound.

Maintaining security.

Ensuring the safety requirements in the campus.

There is a well laid down procedure for reporting un-serviceabilities if any for undertaking suitable repairs.

The college gives contract for running vehicles in order to bring students and staff from different points. There are 28 such vehicles. A committee has been constituted for the day to day smooth running of the vehicles. Each vehicle has a co-ordinator.

Functions of the committee

The committee administers the college buses by overseeing the condition of the vehicles, appointment of well trained and experienced drivers, necessary clearance certificates, insurance, permits etc. for the vehicles, and ensuring safety requirements like operation of Speed limiters, fire extinguishers etc.

4.4.3 How and with what frequency does the institute take up calibration and other precision measures for the equipment/instruments?

Calibration of the instrumentation equipment is taken up by the respective departments as and when required basis.

4.4.4 What are the major steps taken for location, upkeep and maintenance of sensitive equipment (voltage fluctuations, constant supply of water etc.)?

The college is a HT consumer of KSEB and took a load of 391 KVA, and has the connectivity through an exclusive 400 KVA transformer to sustain the voltage fluctuations. The college has a total of 312.5 KVA standbys Diesel Generator set for the uninterrupted power supply and this power supply also through UPS and power stabilizers. Institute has trained staff for maintenance of UPS. Earthing pits are regularly checked and maintained. The institution has a tie up with the company from which the RO purifiers were brought and the institution pays AMC to the firm for the regular and routine check up and upkeep of the purifiers.

Any other relevant information regarding Infrastructure and Learning Resources which the college would like to include.

The following are the best practices of our institution with respect to creating, maintaining and upgrading of Infrastructure and Learning Resources

Spacious, sprawling and eco friendly campus.

Over 35,621 sq.m of built up area.

Access to 32,879 books

Central computer centre with internet facility on all the days with extended hours.

WiFi enabled campus.

Adequate number of spacious class rooms, laboratories, seminar halls, meeting halls, faculty chambers etc.

Seminar halls in every department,

Audio-video facilities & Digital library

Internet browsing centre.

LCD, OHP and interactive board facility equipped smart class rooms.

Excellent indoor and outdoor sports facilities, grounds and gymnasium.

Remedial classes for slow learners.

Free Transport facility for senior faculty.

Regular up-gradation of the infrastructure and learning resources.

CRITERION – V

**STUDENT SUPPORT AND
PROGRESSION**

CRITERION V

STUDENT SUPPORT AND PROGRESSION

5.1 Student Mentoring and Support

5.1.1 Does the College have an independent system for student support and mentoring? If yes, what are its structural and functional characteristics?

Yes, the college has an independent system for the student support and mentoring. Tutor scheme gives emotional support to the new comers and lessens their anxiety. In this scheme, batches of 30 students are assigned to each faculty of the college. Tutors are available all the time to support and advice their students. The students are free to contact the tutor with a wide range of problems such as academic and also personal problems such as problems in the family, problems due to relationships, depression, anxiety and loneliness. The tutor addresses and responds to all the academic and non-academic challenges of the students. The cell extends its service to the students in career guidance, counseling, organizes lectures concerning career planning and invites companies for campus recruitment.

5.1.2 What provisions exist for academic mentoring apart from class room work?

Apart from classroom interactions, there are ample opportunities for the students to develop and grow in their academic and other related fields.

- The departments organize national and international level seminars, conferences, paper presentations, project exhibitions where the students get opportunities to interact with experts in their respective fields in the subject.
- The Alumni Association has been meeting from time to time to provide a platform to the students to come in contact with their seniors who are working in different spheres. These interactions help the students prepare themselves as per demand in the job market.
- The departments also arrange and organize special lectures/workshops in association with the Training, Counseling and Placement Cell, which also help the students to develop and grow.

5.1.3 Does the College provide personal enhancement and development schemes for students? If yes, describe techniques employed e.g., career counseling, soft skill development, etc.

The college has several such schemes wherein the students get opportunities for personal enhancement and growth. The Training, Counseling and Placement Cell provide guidance and counseling facilities to the students. The Training and Placement Cell organizes special lectures and workshops relating to soft skills and personality development. It also makes arrangements for preparing the students for job market by making them learn employability skills. The teachers and

Heads of the Departments provide orientation to the students of their respective departments. The Departments also, organize health awareness camps almost every year for the students and other faculty members. Every Department is organizing special coaching to develop soft skills related to their departments.

5.1.4 Does the College publish its updated prospectus and handbook annually? If yes, what are the activities / information included / provided to students through these documents? Is there a provision for online access?

Yes, the college publishes its updated handbook every year by showing its salient features and is provided to the students every year.

It covers the following aspects

Brief history about college

Management

Infrastructure

Program details (UG & PG)

Brief introduction about Departments & Laboratories

Information about Library

Placements activity

Extracurricular activities

Achievements

Rules and Regulations

Various Scholarship details

Website details for online access

The college implements the programs as published in the prospectus. Any changes in infrastructure or staff, system and process if made are mentioned in prospectus. Shortcomings, if noticed, are made up.

5.1.5 Specify the type and number of scholarships/freeships given to students (UG/PG in tabular form) by the College Management during the last four years. Indicate whether the financial aid was available on time.

Sl No.	Name of Scholarship	2012-13	2013-14	2014-15
1	MCM	2325000	4025000	4825000
2	CSS	30000	30000	30000
3	KEAM	2400000	2400000	2400000
4	E-grants	1500000	1500000	1500000
5	Management	7698502	12485600	11980880

There is a staff looking after the scholarship aspects and all the scholarships are given on time so that the students are not put into trouble.

5.1.6 What percentage of students receives financial assistance from state government, central government and other national agencies?

About 41% of students receive financial assistance from state government, central government and other agencies.

5.1.7 Does the College have an International Student Cell to cater to the needs of foreign students? If so, what measures have been taken to attract foreign students?

Students are not admitted from any foreign countries. If any student is admitted in future, necessary steps will be taken to cater to their needs.

5.1.8 What types of support services are available for

- overseas students
- physically challenged /differently abled students
- SC/ST, OBC and economically weaker sections
- students to participate in various competitions/conferences in India and abroad
- Health centre, health insurance etc.
- Skill development (spoken English, computer literacy, etc.,)
- Performance enhancement for slow learners / students who are at risk of failure and dropouts
- Exposure of students to other institutions of higher learning/ corporates/ business houses, etc.
- Publication of student magazines

Overseas students:

The exclusive support services are not generated for the overseas students at present because there are no overseas students. The College is located in the interior region to educate the rural students.

Students with physical disabilities:

The college is sensitive to the needs of the physically disabled students. There are not much students belonging to differently-abled category. However, provisions have been made for various support services.

SC/ST /OBC and economically weaker sections

The students belonging to SC/ST/OBC avail the Scholarship / freeship as provided by the Government. Economically weaker students are encouraged and supported by fee waiver scheme. The college has Book bank facility for the SC/ST students. By this scheme, Library issue additional books/references to those students. College offers prizes/ Scholarships to meritorious students.

Students to participate in various competitions/conferences in India and abroad

Seminar / Workshops, Symposiums, Paper Presentations, Presentation on Communication skill development, motivational lectures by expert faculty are arranged by the concerned departments of the college and also by various clubs of the college for the benefit of the students . The students are allowed to other colleges inside the state to participate in various competitions. For that, on duty technical help is provided by the college. The usage of internet facilities for research journals is made available. This helps the students to keep in touch with the recent developments.

Health centre, health insurance etc.

The college has a tie up with a multi speciality Hospital (Jeevodaya Hospital, Chelakkara) situated within 8 km, Jubilee Mission Medical College & Research Institute, Thrissur and Trichur Institute of Mental Health and Neuro Sciences, Thrissur. Copies of the MoU attached.

First aid facility is available in the college . 24 x 7 transport facility is available.

Skill development (spoken English, Computer literacy etc.)

Training and Placement Cell (TPC) of the college organizes the communication skills, soft skills and personality development sessions on regular basis for the students. Communication skill lectures are arranged for students with poor communications skill. All students have user level proficiency in MS-Office and Basic programming languages.

Performance enhancement for slow learners / students who are at risk of failure and dropouts.

These students are given additional input like practices of basics of mathematics, extra classes for difficult subjects after the college working hours. Many motivational lectures are organized for the students. Individual counseling by Heads of the departments, class teachers and tutor is carried out.

Exposures of students to other institution of higher learning/corporate/business house etc.

The students are encouraged to attend national and international seminars/ workshops and symposia, conducted at various universities and research institutes.

Guest lectures by eminent speakers are organized to help the students to keep pace with the recent developments in their subjects.

Industrial visits are also helping them keep in touch with the latest developments.

Industry based trainings are organized by TPC of the college.

Organizing coaching classes for competitive exams

GATE and Civil Service exam preparation guidance.

Publication of student magazines:

Magazines are published by the respective department associations during the functions like symposium, workshops every year.

Magazines are also published by the various clubs during the functions every year.

The college provides opportunities to the students to publish their ideas and understanding in different forms.

Students are encouraged in this direction in the following forms

- Students are given the required motivation and conceptual help for preparing technical papers for National level paper contests
- Financial support is also accorded as per norms
- College website depicts the activities and achievements
- Working models are displayed by the students as a part of the celebrations
- Students are encouraged to contribute to the College Magazine

5.1.9 Does the College provide guidance / coaching classes for Civil Services, Defense Services, GATE and any other competitive examinations? If yes, what is the outcome?

Yes. Coaching classes for the competitive exams like GATE, Civil Service Examinations are conducted in the college which will be useful for the students to get qualified in the examinations.

5.1.10. Mention the policies of the College for enhancing student participation in sports and extracurricular activities through strategies such as * additional academic support, flexibility in examinations * special dietary requirements, sports uniform and materials * any other

- Policies and strategies of the college are framed in such a way to promote participation of students in extra-curricular and co-curricular activities and to motivate maximum number of students to participate. One hour from Monday to Thursday is set apart for this.
- The college is providing financial support for transportation, entry fee payment to participate in the sports competitions and the students are given permission to practice for the competitions whenever necessary.
- The college has supportive environment to encourage students to participate in activities of their interest. The cultural and sports committees give opportunities to students to display their talents.
- The college also promotes the participation of the students in intercollegiate competitions. A part of entry fee for competitions and conveyance allowance is borne by the institution.

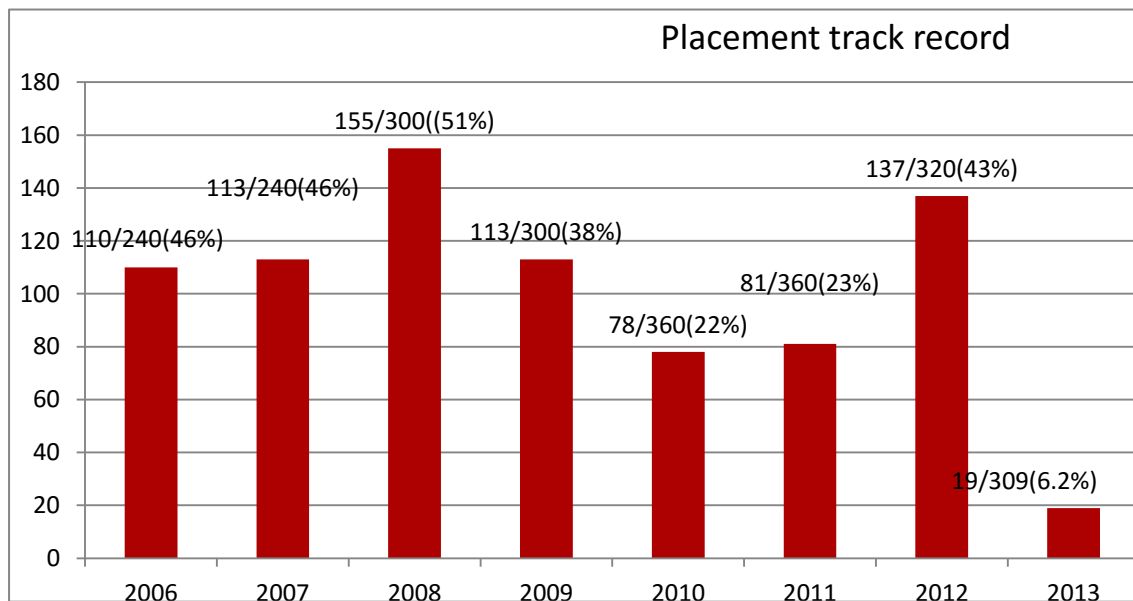
5.1.11. Does the College have an institutionalized mechanism for placement of its students? What services are provided to help students identify job opportunities, prepare themselves for interview, and develop entrepreneurship skills?

Yes. There is structured mechanism for career guidance and placement of its students in the name of Training and Placement Cell (TPC)

- TCP career counseling center renders guidance to the students in formal and informal ways. The cell organizes lectures on career opportunities.
- It invites companies for campus recruitment and sometimes students are sent to off campus interviews.
- Besides campus interview, TPC conducts aptitude tests, personality development and inter personal communication workshops and entrepreneurship development programmes with external experts.
- Arranges inplant training to the industries during vacation.
- Recommends names of graduates for recruitment in various industries.
- Announces opportunities available for placement and higher studies and competitive exams.

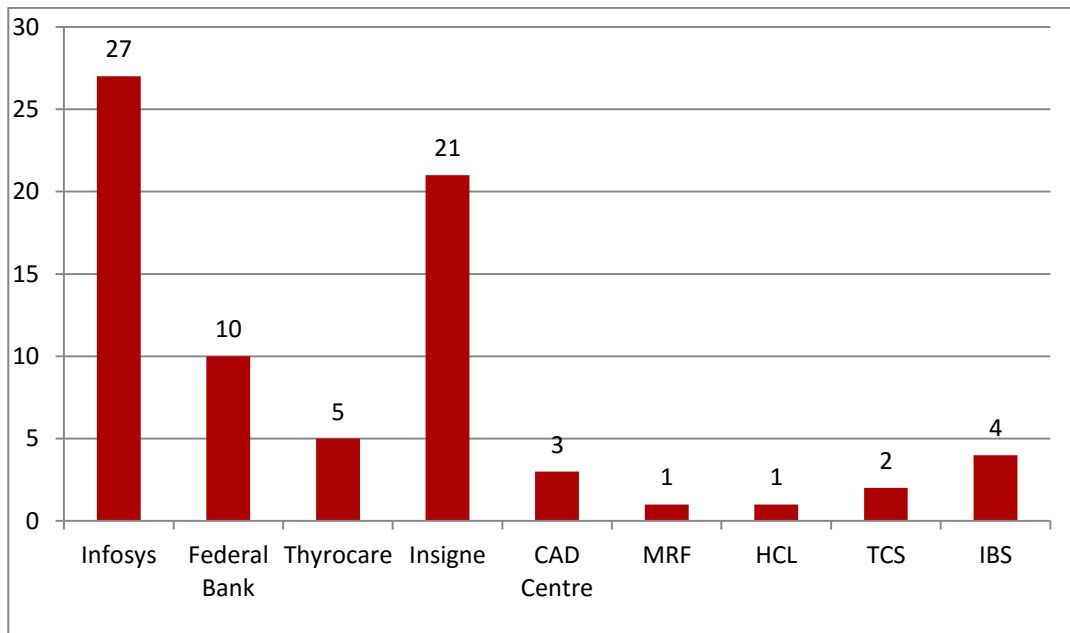
5.1.12. Give the number of students selected during campus interviews by different employers (list the employers and the number of companies who visited the campus annually for the last four years).

Infosys, TCS, UST Global, IBS, HCL, MRF, South Indian bank, Federala bank, Thyrocare, Insigne, are the main recruiters. The number of students who got placed since 2006 in various companies are given below.



Details of students who got placed in 2014 (71 out of 330 -22.42%) are given below.

Placement track in various companies in 2014



5.1.13 Does the College have a registered Alumni association? If yes, what are its activities and contributions to the development of the College?

Yes. The college has a registered alumni association which was started in the year 2008.

- conducts alumni meet every year.
- College has alumni data base and separate website. The college invites them to regular functions.
- College invites alumni to give the guest lecturers & interact with students to enhance the knowledge & skills of the students.
- Regular Student as well as alumni get the account on Institute websites which help them to interact with college.
- Alumni association provides financial aids to the students.

5.1.14 Does the College have a student grievance redressal cell? Give details of the nature of grievances reported and how they were redressed.

Yes. The college has a student grievance redressal committee. Tutors, class- in-charges take care of the student's grievances. The students can apply to the tutors for redressal of grievances. The grievances about tests, behavior and also other grievances are addressed.

5.1.15 Does the college have a cell and mechanism to resolve issues of sexual harassment?

The college always involves lady faculty and girls representatives in all the students and faculty activities. The representatives closely monitor the activity and if a need arises give feedback to the

concerned authority. The authority refers the matter to a committee set apart for to oversee sexual harassment. The committee resolves the issues by taking proper punitive actions.

5.1.16 Is there an anti-ragging committee? How many instances (if any) have been reported during the last four years and what action has been taken on these?

Yes. The college has an anti ranging committee which takes preventive actions to avoid ragging. The Committee gives wide publicity to related acts, statutes and punishments.

No instance is reported.

5.1.17 How does the college elicit the cooperation from all stakeholders to ensure overall development of the students considering the curricular and co - curricular activities, research, community orientation, etc. ?

The college is having industrial interaction through Memorandum of Understanding (MoU) with industries to upgrade and to ensure the development of the students for the employability of the

students. Suggestions from recruiters, alumni members & other stakeholders are considered. Parent's suggestions are also considered in community orientation. Subject experts from industries are appointed as members of Academic committees who participate in the process of framing and fine tuning the activities.

Research and Development cell (R&D) will motivate and promote the research activities.

5.1.18 What special schemes/mechanisms are in place to motivate students for participation in extra-curricular activities such as sports, cultural events, etc?

Policies and strategies of the college to promote participation of students in extra-curricular and co-curricular activities are to motivate maximum number of students to participate.

- Provide financial support for transportation and entry fee payment.
- From Monday to Thursday, the last period is set apart for extra-curricular and co-curricular activities
- The college has supportive environment to encourage students to participate in activities of their interest. The college is organizing cultural festival every year and conducts events to explore the students ideas and knowledge. The college intimates the various intra and inter college competitions and allowing the students to participate in the competitions.
- Sports committees give opportunities to students to display their talents and organize various inter college, Intra college, state level, National level competitions.
- College T-shirts are given to those representing college.

5.1.19 How does the college ensure participation of women in ‘intra’ and ‘inter’ institutional sports competitions and cultural activities? Provide details of sports and cultural activities in which such efforts were made?

The women students are allowed to participate in various inter and intra college competitions. Separate lay fields are arranged for women for 1. Badminton 2. Basket Ball and 3.Volley Ball.

Conduct of separate selection trials for women to pick up talented players for participation at Inter Collegiate tournaments.

- Provide separate uniform for participation in major tournaments.
- Separate athletic individual events.
- Presentation of individual women championship every year.
- Encouragement for participating inter collegiate tournaments like Games, Athletics etc.,
- Presenting meritorious certificates and prizes to the winners and runners in intramural competitions for women on college annual sports day celebrations.
- Providing T.A, D.A and Sports Uniform to the College team players for participation at inter-collegiate and other recognized tournaments
- Grant of attendance to the participating students in the competitions
- Organizing inter-collegiate tournaments from time to time.

5.2 Student Progression

5.2.1 Provide details of programme-wise success rate of the college for the last four years. How does the college compare itself with the performance of other autonomous colleges / universities (if available?)

Program Wise Success Rate for the Last 4 years

Department	Batch	No. of students Admitted	No. of Students Reached Final Year	No. of Students Passed	Pass Percentage
Computer Science Engineering	2011-12	60	57	53	92.98
	2012-13	57	56	50	89.29
	2013-14	63	59	59	100
	2014-15	52	52	51	98.08
Electronics & Communication Engineering	2011-12	60	60	51	85.00
	2012-13	60	60	54	96.67
	2013-14	61	61	61	100 %
	2014-15	61	61	54	88.52

Electrical & Electronics Engineering	2011-12	61	61	58	95.08
	2012-13	59	59	58	98.35
	2013-14	64	64	62	96.88
	2014-15	44	44	44	100
Mechanical Engineering	2011-12	60	60	40	66.67
	2012-13	60	58	42	72.41
	2013-14	64	64	59	92.19
	2014-15	110	110	103	93.4

5.2.2 What is the Programme-wise completion rate/dropout rate within the time span as stipulated by the college/University?

The average dropout rate is around 1 percent in some departments due to their own willingness because of their personal problems. It is nil in some other departments.

5.2.3 Provide details regarding the number of Ph.D/D.Sc./D.Litt. theses submitted, accepted, resubmitted and rejected in the last four years.

The College is not an approved research centre.

5.3 Student Participation and Activities

5.3.1 List the range of sports and games, cultural and extracurricular activities available to students. Provide details of participation and program calendar.

- The college organizes sports like basketball, cricket, football, volley ball, chess, carom, table tennis, etc.,
- Students have participated and win prizes
- College has National Service Scheme (NSS) unit of strength of 100 students.
- Students are encouraged to publish articles on the new technologies& innovations in the leading news paper.
- College conducts technical paper presentation, project, innovation, software development, aptitude tests competitions for students.

5.3.2 Provide details of the previous four years regarding the achievements of students in co-curricular, extracurricular activities and cultural activities at different levels: University / State / Zonal / National / International, etc.

The college has a multi-layered mechanism for the extra-curricular activities

Games and Sports

The Department of Physical Education looks after the games and sports activities. The Department is headed by a qualified Physical Education Lecturer. The college has the required infrastructure complemented by huge play fields. The participation of students in games and sports activities is fundamentally of two types:

Intramural sporting activity

Representing the college outside Intramural competitions is organized time to time every year. The college teams participate in the tournaments whenever they are held all through the year without prejudice to academics. The list of sports and games in which have regularly been participating

Basketball, Volleyball, Football, Gymnastics, Hockey, Athletics, Badminton, Chess and Carroms

5.3.3 How often does the college collect feedback from students for improving the support services? How is the feedback used?

The college collects feedback from the students of all the Departments every semester. The same will be analyzed. Also, feedback from the students is obtained to provide valuable inputs for improving the support services like central library, hostels, sports activities, health centre, transportation, and books.

5.3.4 Does the college have a mechanism to seek and use data and feedback from its graduates and employers, to improve the growth and development of the college?

- The college regularly interacts with the alumni. It also organizes alumni meet and collects the addresses of the employers through the feedback questionnaire from the alumni.
- After the campus interviews, the college interacts with employers and collects the feedback from them.
- The TPC contacts the employers with specific questionnaire to obtain feedback from the employers regarding the expertise, proficiency, efficiency, attitude to work in team spirit, aptitude to perform the assignment, and the skills. The employers also point out deficiencies, if any. Based on these inputs, the institute modifies or revises the existing curricula and introduces new academic programs.
- Similarly, the Institute gets the feedback during industry visits.
- The college analyses the feedback for improvement in curriculum, infrastructural facilities, and teaching learning process and information systems. Based on the inputs it improves the domains where there is need for reforms and modifications.
- This has improved the quality of performance of our alumni and brought in higher standards in the teaching-learning process.

5.3.5 How does the college involve and encourage students to publish materials like catalogues, wall magazines, college magazine, and other material? List the major publications/ materials brought out by the students during the previous academic session.

- The college has a definite vision on development of various creative skills of the students. The training and encouragement is aimed at encountering the complexities of future

challenges. The faculty with experience and exposure in this particular area guide the students to explore themselves.

- The college has various publications but not on regular basis which are edited by the teachers and students that create a platform for the students' creative thinking. It focuses on the socio-cultural and academic issues. It encourages the students to sharpen their imagination.

5.3.6 Does the college have a Student Council or any similar body? Give details on its constitution, major activities and funding.

Every class has a Class Committee in which students are the members. The students represent their views in subjects, syllabus and other related issues and problems. NSS, IEEE Students Chapters have students' representations and they organize various programs like paper presentations, symposiums, workshops, seminars, camps for personality development cleaning programmes etc. every year. The funding will be provided by the college to organize the activities .

5.3.7 Give details of various academic and administrative bodies that have student representatives on them. Provide details of their activities.

The college creates a platform for the involvement of the students in various academic, administrative and other activities. This empowers the students to gain qualities of leadership and governance.

Class Committee:

Class committees are constituted for each class at the start of classes of each semester. This class committee shall be in existence for the semester concerned. The class committee shall consist of the Head of Department, Staff Advisor of the class, a senior faculty member of the department, a faculty member from another department, and three student representatives (one of them should be a girl).

There should be at least two meetings of the class committee every semester; it shall be the responsibility of the Head of Department to convene these meetings. The decisions of the Class Committee shall be recorded in a register for further reference. Each class committee will communicate its recommendations to the Head of Institution.

The responsibilities of the class committee are:

- (a) to review periodically the progress and conduct of students in the class.
- (b) to discuss any problems concerning any subjects in the semester concerned.
- (c) to identify weaker students of the class and suggest remedial measures.
- (d) to review teaching effectiveness and coverage of syllabus.
- (e) to discuss any other issue related to the students of the class.

ISTE Student Chapter, IEEE Student branch:

Students are the members of this chapter. Under this, academic activities like symposiums, workshops/seminars, paper presentation competitions, quiz, project competitions are conducted.

NSS :

It aims to inculcate the values of social service in the personality of the students. It organizes various programs like awareness rally, camps, competitions every year. Various programmes have been organized by NSS unit each year. Some of them are given in the Swachh Campus report.

Department Association:

It organizes programs regularly to enhance the skills of the students. Students are the office bearers of department associations. Under these, academic activities like symposiums, workshops/seminars. The activities of the associations of various departments are elaborated in the Department Evaluation Reports.

CRITERION – VI

**GOVERNANCE, LEADERSHIP
AND MANAGEMENT**

CRITERION VI

GOVERNANCE, LEADERSHIP AND MANAGEMENT

6.1 Institutional Vision and Leadership

6.1.1 State the vision and mission of the Institution and enumerate on how the mission statement defines the institution's distinctive characteristics in terms of addressing the needs of the society, the students it seeks to serve, institution's traditions and value orientations, vision for the future, etc.?

Vision

Creating eminent and ethical leaders through quality professional education with emphasis on holistic excellence.

Mission:

To emerge as an institution par excellence of global standards by imparting quality engineering and other professional programmes with state-of- the-art facilities.

To equip the students with appropriate skills for a meaningful career in the global scenario.

To inculcate ethical values among students and ignite their passion for holistic excellence through social initiatives.

To participate in the development of society through technology incubation, entrepreneurship and industry interaction.

The management is committed in assuring quality service to all its stake holders parents, students, alumni, employees, employers and the community. Our commitment and dedication are built into our policy of continual quality improvement by establishing and implementing mechanisms and modalities ensuring accountability at all levels, transparency in procedures and access to information and actions.

6.1.2 What is the role of top management, Principal and Faculty in design and implementation of its quality policy and plans?

The faculty members are actively involved in decision-making process at their levels. They are members of College Academic Council which are involved in decision making in academic matters. Two senior faculty members are also members of the College Governing Body, the highest body in the process of managing the college. The Faculty members are members in various committees like Purchase Committee, Library Committee, Student Grievance & Redressal Cell, Examination Cell (Internal Examination), Examination Monitoring Cell, Transport Committee, Placement Cell, Hostel Committee, Committee for Industry – Institute Partnership Cell, Committee for Public Relations, Store Committee, Anti Ragging Cell, Cultural Events Screening Committee, NBA Accreditation Committee, NAAC Accreditation Committee, Academic Disciplinary Action

Committee, Project Committee, Anti Narcotic Cell, Research and Development Cell, Campus Beautification Committee, Canteen Committee, N.S.S Advisory Committee, Website Committee, Internal Quality Assurance and Audit Cell that are constituted for the smooth conduct of various events.

All the new and revised policies to improve academic activities, methodology of conducting examinations are reviewed and discussed in HODs meeting before implementation. Importantly, the Principal provides academic leadership and in association with the various faculties, evolves strategies for academic growth of the college. For the effective and efficient implementation of its Quality Policy, the management has promulgated the following practices which shows the commitment, leadership role and its involvement in the same.

- i) Adequate financial support to each department and programme for facilitating the academic achievements.
- ii) Recruitment of qualified staff as per AICTE guidelines.
- i) Motivation, guidance, appreciation and moral support to all the stakeholders.
- ii) Involvement in academic events organised by the college.
- iii) Developing effective mechanism for monitoring the activities.
- iv) Arranging periodical meetings for interactions with teaching and non-teaching staff.

The following Practices are adopted.

- a) The Management provides an amicable ambience and research academic amenities to facilitate faculty improvement. Thus 12 faculty members have registered for Ph.D programmes.
- b) To ensure that the teaching – learning process is unaffected, faculty proceeding on study leave are replaced by substitute teachers appointed by the Management, or appointed against leave vacancies. The Management also appoints replacements for teachers who proceed on maternity leave or long leave on medical grounds.
- c) The Management sponsors Faculty Development Programmes for the teaching and non teaching staff to keep them updated on the latest developments in their field of specialization.
- d) The Management has generously contributed towards acquiring teaching learning support equipments like OHPs, LCD projectors and laptops, interactive digital boards, wide screen TVs and DVD players, digital camera and handy cam to enable teachers to use multimedia learning resources and create a rich learning environment.
- e) Teachers have been trained in the use of basic ICT tools and every Department has been with a computer and printer, access to wi-fi etc.
- f) Funding has been provided for teacher-led student research projects.
- g) Budgetary provisions have been made for study tours, industrial visits and field trips.

h) Funding support is provided for departmental seminars, project work and guest lectures.

6.1.3 What is the involvement of the leadership in ensuring the policy statements and action plans for fulfillment of the stated mission formulation of action plans for all operations and incorporation of the same into the institutional strategic plan

Interaction with stakeholders

Proper support for policy and planning through need analysis, research inputs and consultations with the stakeholders

Reinforcing the culture of excellence

Champion organizational change

The authorities gather information about the various aspects of college functioning through a number of ways.

The management encourages the participation of the staff in the process of decision-making in institutional functioning. Teachers have their representatives in the Colleges Governing Body, which is its highest decision-making body.

The college has constituted different Committees with teachers and members of the non-teaching staff which play an important role in the planning and implementation of activities in different spheres of institutional functioning.

The personal interaction of the Principal with various stakeholders, the faculty, the non teaching staff, the students, the guardians play an important role in this. This apart, information available in student feedback forms and information available in self-appraisal forms of teachers help the authorities plan proper support for the policies.

The participatory role of the management encourages and sustains the involvement of the college staff, which is necessary for the efficient and effective running of the college.

The Principal is the Head of the Institution and he bears the ultimate responsibility for the smooth running of the college. The role of the Principal of the college is multi-dimensional. As the Head of the Institution, the Principal is responsible for both the academic and administrative functioning of the college. He prepares the agenda for Governing Body meetings. He places before the Body, academic and administrative matters requiring the Body's approval and he is responsible for executing its decisions. The Principal receives reports from the different College Committees, which offer advice to him in matters defined in the terms of reference of their functions.

6.1.4 What are the procedures adopted by the institution to monitor and evaluate policies and plans of the institution for effective implementation and improvement from time to time?

The college mainly believes in spreading technical knowledge to the students to prepare them to meet global requirements in terms of employability, research orientation and entrepreneurship etc., accordingly the quality policy is developed. The mission is created to give thorough knowledge on engineering concepts to the students along with reasonably good amount of hands on skills. To improve analytical skills, tutorials are introduced.

The effective improvement of students in terms of academics is measured through percentage of marks obtained with reference to earlier situation.

The rise in percentage of marks is again reviewed in Heads of the Departments meeting for further improvements.

The feedback on the academic activities, extra-curricular activities and administrative efficiency from students and all stake holders is taken regularly. It is analyzed in the regular meetings of the teaching and non-teaching staff, discussed and decisions are taken on various issues.

The performance of faculty is assessed regularly through self- appraisal reports, reports on the academic activities, examination results, college annual, annual social gatherings, co-ordinators reports meetings, visits and observations.

The management is informed of any deviations, any disciplinary actions, achievements, requirements and important events by the head of the institution, Principal.

6.1.5 Give details of the academic leadership provided to the faculty by the top management?

The Management of the college is in constant touch with the Principal and has an amicable rapport. In the college, the members of the Governing Body meets frequently and the problems and issues related to college development, administration, appointment and infrastructural needs and student disciplines are discussed. In the Governing Body meeting, Principal and some staff members nominated by the management are also present to provide information and suggestions if any. In the meetings, responsibilities are defined and communicated to the staff through the head of the institution.

Heads of the Departments are in-charge of executing the policies with little variation depending upon the quality of students and number of staff available in each department. Most of the staff are nominated to be the members of institutions committees like Purchase Committee, Library Committee, Student Grievance & Redressal Cell, Examination Cell (Internal Examination), Examination Monitoring Cell, Transport Committee, Placement Cell, Hostel Committee, Committee for Industry – Institute Partnership Cell, Committee for Public Relations, Store Committee, Anti Ragging Cell, Cultural Events Screening Committee, NBA Accreditation

Committee, NAAC Accreditation Committee, Academic Disciplinary Action Committee, Project Committee, Anti Narcotic Cell, Research and Development Cell, Campus Beautification Committee, Canteen Committee, N.S.S Advisory Committee, Website Committee, Internal Quality Assurance and Audit Cell etc., so that they can put forth their innovative ideas to achieve better results.

Management and the Principal ensure that every staff has a clearly defined role with specific duties and responsibilities. This is communicated to the staff at the time of appointment by providing a copy of the Service rulebook and orientation programmes for new recruits. Under the leadership of the Principal, chairpersons of various committees & course coordinators are engaged in assigning, delegating, co-ordinating and communicating responsibilities to the staff members as per the established system. The responsibility assigned to the teachers is displayed on notice board and also conveyed to them in the periodical meetings/ reviews and by issuing personal letters to them. The responsibilities are defined and communicated to the staff of the College through official orders.

6.1.6 How does the college groom leadership at various levels?

College observes staff through student feedback, self evaluation report submitted by students and their active involvement in conducting workshops, seminars, publication of papers etc., generally based on the interest of the staff they are encouraged in those particular areas. The management is always encouraging and supporting the involvement of the staff in the improvement of the effectiveness and efficiency of the institutional process. The management through the Principal involves the staff members in various activities related to the development of the college. The staff members are involved by way of constitution of various committees such as

Strategic Planning Committee

Purchase Committee

Library Committee

Student Grievance & Redressal Cell

Examination Cell (Internal Examination

Examination Monitoring Cell

Transport Committee

Placement Cell

Hostel Committee

Committee for Industry – Institute Partnership Cell

Committee for Public Relations

Store Committee

Anti Ragging Cell

Cultural Events Screening Committee

NBA Accreditation Committee
NAAC Accreditation Committee
Academic Disciplinary Action Committee
Project Committee
Anti Narcotic Cell
Research and Development Cell
Campus Beautification Committee
Canteen Committee
N.S.S Advisory Committee
Editorial Board of JECC News
Website Committee
Internal Quality Assurance and Audit Cell

The management always encourages and supports the involvement of the staff through their representation on the various committees and bodies for the improvement of the effectiveness, efficiency of the institutional processes.

Best Teacher Award for faculties producing good results.

Yearly increment to encourage the faculty.

Study leave and other support to faculty to do research activities.

Encourage the faculty members to publish their research findings in refereed journals by sponsorships to participate in conferences, seminars, workshops etc.,

Periodical meetings are conducted to encourage and motivate the staff members and to redress their grievances, if any.

6.1.7 How does the college delegate authority and provide operational autonomy to the departments / units of the institution and work towards decentralized governance system?

The Principal is the administrative head of the College. However, certain administrative functions are delegated to the Heads of Departments and various functionary committees to ensure a decentralized governance system. The Committees involving staff members perform an advisory role in matters within their designated sphere of activity and also help in the execution of administrative decisions.

Some of the Committees, which have been assigned such a role in the College, are as follows:

a) Academic Council:

The academic council is entrusted with the task of

1. Oversee the teaching learning process
2. Carry out result analysis
3. Initiate supplementary teaching measures
4. Arrange for student orientation of freshers
5. Maintain quality management system

The administration seeks its advice on all academic matters.

a) Purchase Committee:

It advises on all College acquisitions and also has a monitoring function.

Various other committees like

Strategic Planning Committee, Staff Selection Committee, Library Committee, Student Grievance & Redressal Cell, Examination Cell (Internal Examination), Examination Monitoring Cell, Transport Committee, Anti Ragging Cell and Anti Narcotic Cell assist in the effective and efficient functioning of the college.

Heads of Departments play an important role in advising the Principal and Management on matters of academic administration, student affairs and any other matter referred to them. All these steps ensure that effective decentralization of powers to Heads of Departments and Committees pave the way for efficient administration.

6.1.8 Does the college promote a culture of participative management? If yes, indicate the levels of participative management.

Yes.

The College promotes a culture of participative management. The management of the college rests with its Governing Body, whose members are appointed in accordance with the guidelines provided by the Department of Technical Education, Calicut University, APJ Abdul Kalam Technological University and AICTE. The Principal is the academic and administrative head of the college and also the Member Secretary of the Governing Body. The Heads of Departments are responsible for the day-to-day administration of the Departments and report directly to the Principal. Additionally, the College has a number of Committees, as mentioned in 6.1.6 which play an important role in various institutional functions.

These committees meet regularly and discuss the agenda items as per their terms of reference. The minutes of these meetings are recorded and sent to the management for consideration and implementation.

6.2 Strategy Development and Deployment

6.2.1 Does the Institution have a formally stated quality policy? How is it developed, driven, deployed and reviewed?

Quality policy

The management is committed in assuring quality service to all its stake holders parents, students, alumni, employees, employers and the community. Our commitment and dedication are built into our policy of continual quality improvement by establishing and implementing mechanisms and modalities ensuring accountability at all levels, transparency in procedures and access to information and actions. The college is committed in imparting quality Education and Training, in the field of Engineering and Technology. It aims to be an institute of excellence in Technical Education through continual improvement. The college facilitates faculty and support staff to work as a team and update their knowledge and skills, to match the industrial and technological development. The college mainly believes in spreading engineering knowledge to the students to prepare them to meet the global requirements in terms of employability, research orientation and entrepreneurship etc., accordingly quality policy is developed.

The development of the perspective Institutional Plan is initiated, keeping in view the National policies in higher education, existing priorities and local needs. It begins with informal consultations with a cross-section of stakeholders including community leaders, prominent academicians, faculty members, staff and students. This is followed by a formal meeting of stakeholders convened by the Principal, where the plan is discussed and responsibility assigned to prepare a draft incorporating all stakeholder views. The final draft is presented to the Governing Body for its approval.

6.2.2 Does the Institute have a perspective plan for development? If so, give the aspects considered for inclusion in the plan.

Long term goals

- ♣ provide high quality technical education on par with international standards.
- ♣ become the top ranked technical institution in Kerala
- ♣ introduce various professional programs in collaboration with global institutions of repute.
- ♣ introduce industry relevant programmes in association with leading industries and corporate.

Intellectual

- ♣ provide quality higher education to students by offering relevant programmes and courses
- ♣ facilitate the creation of knowledge capital, knowledgeable and skilled human resource to accept the social, scientific and industry challenges and responsibilities at regional, national and global level.
- ♣ assist in the production of intellectual capital and property in terms of research output, publications, applied research, transfer of knowledge, skills, strategies and technology from laboratory to industry/society in the field of Science, Technology, Arts, Management and allied sciences.
- ♣ excel in tapping human resources through innovative learning across disciplines so as to develop integral thinking;
- ♣ germinate new ideas and perspectives relevant to human empowerment;
- ♣ sow scientific temper through critical thinking and logical reasoning that can trigger creativity and analytical skills;
- ♣ nurture proficiency for individual excellence through exposure to field experience, case study, and skill-based learning, and expand and enrich it by research and critical enquiry;

Academic

- ♣ ensure broad base of curricula while developing relevant, challenging and well taught programmes that engage with theory and practice and with teaching supported by research.
- ♣ respond swiftly to new learning opportunities and lead the development of new areas within the curricula.
- ♣ support the growth of programmes, particularly at postgraduate level, that focuses on identified areas of academic strength, and which will include provision for employer-led, work-based learning and continuing professional development.
- ♣ ensure that the curriculum takes full account of the challenges of our age
- ♣ develop learning spaces and the social environment on our campuses to meet the needs and rising expectations of a diverse student body.
- ♣ expand and adapt systems, where possible, by building upon our network of partners in the local and international markets.
- ♣ facilitate the teaching fraternity to cultivate capacity building with moral leadership among students so as to address global and local needs, and provide solutions to problems afflicting mankind.

Training and Self Development

- ♣ co-ordinate orientation/refresher Programmes, workshops on effective curriculum implementation, research activities and quality initiatives.

- ♣ organise in-house guest lectures, conferences, seminars/workshops to facilitate interaction with the top scientists, corporates, academicians, eminent researchers and world renowned personalities.
- ♣ encourage faculty and students to participate in workshops, seminars, conferences etc. Designing the curriculum specifically in a manner that ensures a unique intellectual adventure to meet the academic and personal goals of the students
- ♣ encourage the faculty to pursue higher education Develop the spirit of team-building and knowledge sharing through outreaching, collaboration, student exchange programmes, and networking with knowledge societies and institutions of higher learning across the globe;
- ♣ harvest a social vision with a praxis towards ushering in an egalitarian and humane society, and
- ♣ garner a win-win situation for all, ensuring a compassionate world view.

For community and national development and value orientation striving

- ♣ develop the overall personality of students by making them not only excellent professionals, but also good individuals, with understanding and regards for “human values”, pride in their heritage and culture, a sense of right and wrong, and a yearning for perfection.
- ♣ organize events like poster making, street plays, essay writing etc. on value based themes.
- ♣ celebrate Human Value Quarter, where students organise and participate in events with value based themes.

Annual Sports Event is organised and that provides an opportunity to all our students to exhibit their talents in various sports events thus building strong bondages of friendship, togetherness amongst them all. It teaches a real world skill that encourages life-long interests, volunteer work, teamwork, leadership skills, dealing with success and failure, sense of responsibility and disciplinary approach.

- ♣ organize Blood Donation Camps and Visits to NGOs
- ♣ teach value based courses like Professional Ethics, Behavioral Science, Environment studies as part of the curriculum.

Ecology and Environment

Jyothi is an eco-friendly (green and clean) campus.

Environment friendly efficient technology has been adopted with a ‘No Smoking Zone’.

One rainwater harvesting well with a storage of 10⁷ litres has been dug. The micro environmental processes are regularly reviewed and monitored by well established Estate Maintenance Department to maintain the ecological balance for keeping the air, water, soil and noise level within safe limits and also to realize that Jyothi Campus is a healthy, workable and livable place.

Environmental Studies is taught to all the Under Graduate students as a compulsory course. The course helps in enlightening the students about the importance of the protection and conservation of our environment and the need to control human activities which have an adverse effect on the environment.

Short term goals:

Strive for attracting quality faculty and provide incentives for existing faculty
to acquire higher qualifications
to adopt innovative teaching methodologies
to optimize the teaching learning processes and
to bridge the gap between theory and practice.

Communication to students, teachers, staff and other stake holders

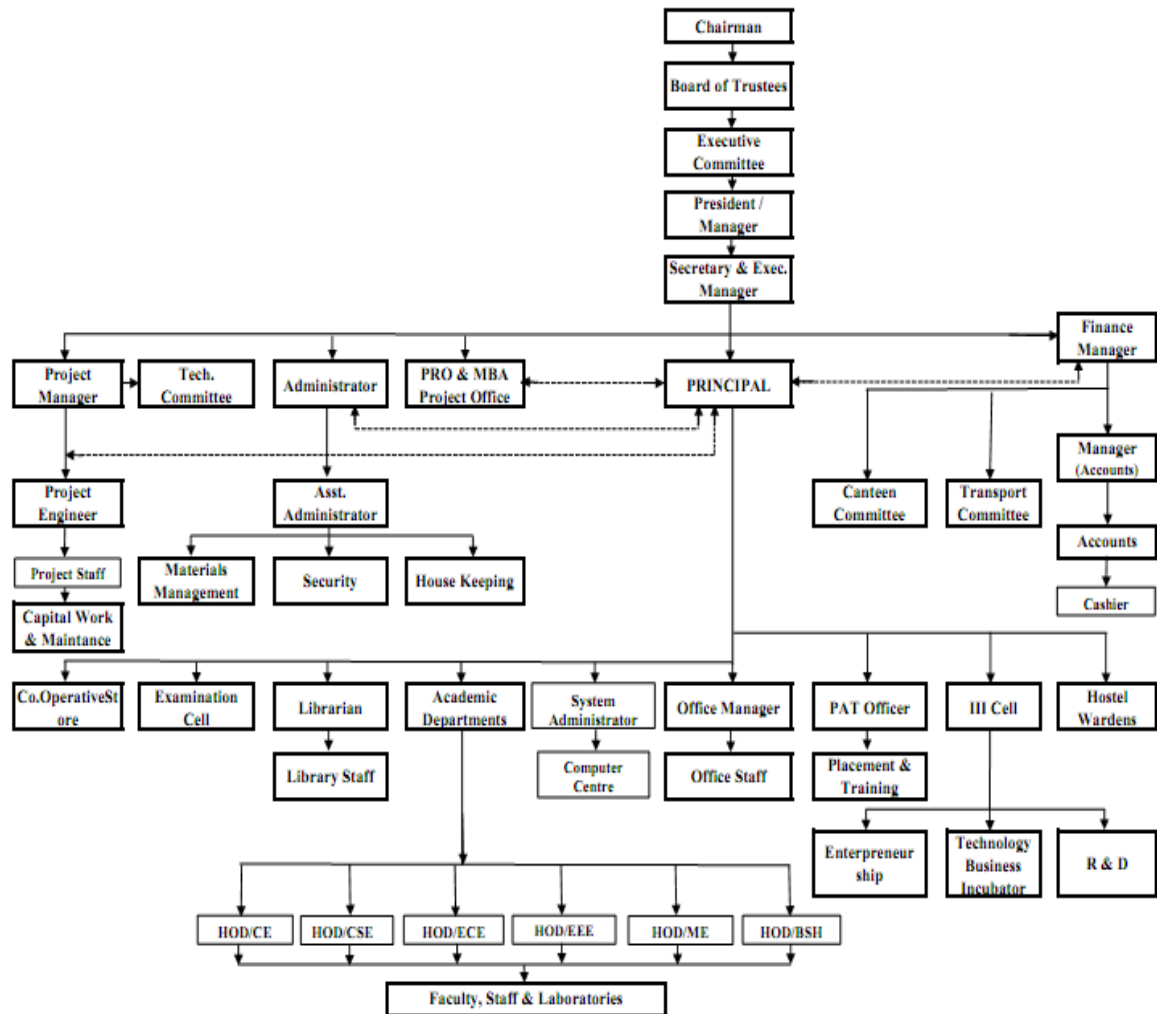
The Vision and Mission statements are communicated to all students, teachers, staff and other stake holders through circulars and notices on campus, display boards and websites. The objectives are also published in the College prospectus making them available to students, parents/guardians and the public.

6.2.3 Describe the internal organizational structure and decision making processes.

Decision making Process:

Policy matters are decided in the Governing body which consists of the Principal, two senior staff members, nominees of AICTE, State Government and Calicut University, APJ Abdul Kalam Technological University, Director of Technical Education, representatives of Regional Officer, AICTE, industries and finance along with Management sector. The organizational chart is depicted below.

Any requirements like equipment, text books and journals are proposed by the staff in charges of each department. All the requirements are discussed at the departmental staff meetings and proposals are sent to the Principal's office. Heads of the Departments and the Principal will finalize the proposals based on the approved budgets of each department and they are procured by calling quotations and negotiations (instead of lowest quotation, importance is given to better quality, durability along with service facility). Students representatives of each department represent their requirements to the concerned Head of the Department which in turn is discussed with the Principal and the requirements are fulfilled.



6.2.4 Give a broad description of the quality improvement strategies of the institution for each of the following Teaching & Learning

The requirement of staff is assessed as per AICTE norms and appointed through the staff selection committee. The staff is exposed to Faculty Development Programmes. Teachers are guided to prepare teaching notes and method of teaching by Heads of the Departments and other senior faculty. All the teachers are exposed to use of OHPs and LCDs. Students are tuned to be more regular to the class work and prepare their subject notes. Students are exposed more to hands on skills through laboratory experiments and industrial visits / training / tours. The amount of knowledge gained by the students is assessed frequently through periodical tests, objective tests, mid examinations and laboratory tests etc.

Based on the assessment, the students who require it, are provided with additional teaching classes / bridge courses / laboratory classes etc.

Research & Development

Considerable number of research papers are published by faculty. M.Tech students are groomed to produce technical papers and contribute to research activities. Research proposals are submitted to various agencies for funding purpose.

Community engagement

Staff and students are actively involved in community services such as community development, Blood donation, Fund raising for natural calamities, AIDS awareness, Clean Development Mechanism, conservation and protection of environmental, General Hygiene and contribution to academic activities etc.,

Human resource management

The services of staff and students are mostly programmed to utilize their services effectively within the time frame available either for academic development or research and development or community development.

Industry interaction

Some of facilities in the college are shared with the industry for effective industry-institute interaction. Consultancy services are provided to the industry. Many a times, resource persons are invited from the industry and the students are exposed to real time projects.

Industry HRs contribute to enhancing additional skills required for the placements.

6.2.5 How does the Head of the institution ensure that adequate information (from feedback and personal contacts etc.) is available for the top management and the stakeholders, to review the activities of the institution?

The feedback received from the students through an interactive method about the academic activities is reviewed regularly. The feedback received through the complaint boxes from the staff and students is recorded and updated. The feedback received from the parents and industries in which students from our college are employed through placements is shared with the Management regularly. The Feedback received from the alumni is considered while reviewing the teaching learning process. The existing procedures are modified according to the feedback within the flexibility provided by the university. Whenever required, additional remarks are received from the Management to meet some of the infrastructural demands. The college uses the various data and information obtained from the feedback, in decision-making and performance improvement. Feedback received from students has been primarily responsible for the following:

- i. Instructions to Heads of Departments to ensure regular engagement of classes.
- ii. Making drinking water available at more points within the campus.

iii. Elaborating the canteen area and facilities.

Feedback from Departments and faculty is taken into account with regard to the following:

Determining the number of students to be admitted to a department and setting of the necessary facilities.

- In preparing the Class Routine for the Academic Year.
- In deciding priorities in infrastructure improvement and
- Deciding the budgetary allocations for the financial year.
- In planning the introduction of new courses.

6.2.6 How does the management encourage and support involvement of the staff in improving the effectiveness and efficiency of the institutional processes?

The Management has given total academic freedom to the Principal and the Heads of the Departments in teaching learning process, adding new equipment to conduct more number of experiments.

Updating computational facilities by upgrading computers and internet connectivity.

Additional rooms were created for conducting tutorials and quizzes.

The Management is also generous in providing funds for sports and cultural activities, incentives are given to the staff in the form of appreciation letters, upgradation of the position etc.,

Students are provided with Medals, cash awards and scholarships to the deserving partially contributing to provide value added courses like (pre placement training programmes, extra coaching for sports, conducting workshops etc.,)

Encouragement to the faculty to undertake R&D and consultancy work.

Certain administrative functions are delegated to the Heads of Departments and various functionary committees to ensure a decentralized governance system.

The Governing body has also approved of the constitution of Committees involving Staff members, which perform an advisory role in matters within their designated sphere of activity and also help in the execution of administrative decisions.

Some of the Committees, which have been assigned such a role in the College, are as follows:

- a) College Academic Council which is involved in decision making in academic matters. The administration seeks its advice on all academic matters.

- b) Finance Committee: It is entrusted with the task of preparing the annual College Budget and advises the administration on financial matters that are referred to it.
- c) Purchase Committee: It advises on all College acquisitions and also has a monitoring function. It advises on new construction activities, which the College proposes to undertake, and also on the maintenance of existing buildings.

Various other committees assist in the effective and efficient functioning of the institution. Heads of Departments play an important role in advising the Principal and Management on matters of academic administration, student affairs and any other matter referred to them. All these steps ensure that effective decentralization of powers to Heads of Departments and Committees pave the way for efficient administration.

6.2.7 Enumerate the resolutions made by the Governing Body in the last year and the status of implementation of such resolutions.

Summary of resolutions made during the meeting on 30-08-2014 by the Governing Body

Sl No	Resolution	Action taken
1	Review of B. Tech. and M. Tech. admissions and lateral entry	Directed to keep the momentum
2	Review of B. Tech. S8 results – 3 rd position among 31 colleges under Calicut University	Congratulated the faculty and advised to improve further. Congratulated the faculty and advised to improve further.
3	Review of Placement and Training. Reviewed the 2014 batch. Decided to entrust the training to external agency. A special training for those who want to appear for Bank recruitment. Decided to entrust the training to external agency. A special training for those who want to appear for Bank recruitment.	Training programmes have been arranged with an external agency.
4	Discussed the academic plan for 2015-16. Decided to double the intake of B. Tech Civil Engineering and add 2 new post graduate programmes in Electronics and Communication Engineering 1. Signal processing and Communication Engineering 2. VLSI Design and Embedded Systems	Applied for approval from AICTE and Calicut University.
5	Techno-cultural fest- 2015 Decided to give prominence to the project presentation the by different colleges.	Conducted the techno-cultural fest THARANG -2015 with emphasis on project presentation.

Copy of the Governing body minutes of meeting enclosed as Appendix

6.2.8 Does the affiliating university make a provision for according the status of autonomy to an affiliated institution? If ‘yes’, what are the efforts made by the institution in obtaining autonomy?

Yes.

The affiliating University has a provision for according autonomy for an affiliated institution. Jyothi has already started the process of preparing for autonomy status as a stepping stone towards accomplishing its mission of becoming one of the top most premier institutions in the state of Kerala. The Accreditation processes by the National Board of Accreditation for the courses offered by Jyothi in Electrical and Electronics Engineering, Electronics and Communication Engineering, Mechanical Engineering and Computer Science and Engineering are in progress. As a part of these processes, the college is now applying to NAAC for accreditation.

6.2.9 How does the Institution ensure that grievances / complaints are promptly attended to and resolved effectively? Is there a mechanism to analyse the nature of grievances for promoting better stakeholder relationship?

The College has an effective Student Grievance & Redressal Cell. There is a set procedure for receiving and addressing the grievances of students. Grievances are addressed to the Principal. The Principal usually deals with the problem but may refer a grievance to the Grievance & Redressal Cell and the students may also appeal directly to the Grievance & Redressal Cell. Most of the Grievances are understood through the feedback given by the staff, students, industries and parents. All the grievances concerned during the academics are discussed with the concerned Heads of the Departments and resolved at the earliest. The grievances concerned to the policy matters are discussed with the Management and they are addressed immediately, if the nature of grievance does not involve financial commitment.

6.2.10 During the last four years, had there been any instances of court cases filed by and against the institute ? Provide details on the issues and decisions of the courts on these?

No-

6.2.11 Does the Institution have a mechanism for analyzing student feedback on institutional performance? If ‘yes’, what was the outcome and response of the institution to such an effort?

Yes.

The students feedback concerned with academic activities are discussed and resolved in the College Academic Council meeting. If the feedback is concerned with the extracurricular activities or transport facilities, campus cleanliness and hygiene or canteen facilities or security they are resolved after discussed with the concerned committees.

6.3 Faculty Empowerment Strategies

6.3.1 What are the efforts made by the institution to enhance the professional development of its teaching and non teaching staff?

The newly appointed staff are expected to interact with the senior staff and Heads of the Department frequently in preparing the lesson plans, teaching notes, teaching methodology and class room control etc., Faculty makes use of NPTEL video lectures prepared by IIT experts to improve teaching learning process. The teaching staff is permitted to attend faculty development programmes conducted within the college and outside the college. Incentives are given to staff members to enhance their professional knowledge by presenting and publishing the papers in national and international conference/ journals. Non teaching staff is guided by the senior staff in the upkeep of the laboratories and handling the equipment. Skill development programs are conducted for Non teaching staff to update their technical knowledge.

6.3.2 What are the strategies adopted by the institution for faculty empowerment through training, retraining and motivating the employees for the roles and responsibility they perform?

All the staff is encouraged to attend seminars and workshops and keep in touch with latest theories and concepts on their subjects. Staff are permitted to attend faculty development programmes conducted at different institutions. Staff are encouraged to participate in Conferences and travel grant is offered for the same. Incentives are given to the staff to publish papers. Staff are permitted to go for QIPs.

6.3.3 Provide details on the performance appraisal system of the staff to evaluate and ensure that information on multiple activities is appropriately captured and considered for better appraisal.

An effectively designed staff appraisal system is in practice. Performance Appraisal form comprises of multiple activities concerned with academic achievements and over all performances. Based on the performance appraisal the staff is given increments.

6.3.4 What is the outcome of the review of the performance appraisal report by the management and the major decisions taken? How are they communicated to the appropriate stakeholders?

Based on the Performance Appraisal, staff is given increment and in some cases additional monetary benefits are provided to the deserving candidates. The achievements are announced in appropriate meetings.

6.3.5 What are the welfare schemes available for teaching and non teaching staff? What percentage of staff have availed the benefit of such schemes in the last four years?

EPF to all the office and lab staff

Medical leave

Subsidised transport to staff

The College's initiatives towards the welfare of its staff and faculty include the following:

- i. Training in the use of computers for non teaching staff to motivate them to undertake self-development.
- ii. Facilitation of faculty participation in programmes for professional development, organized by the College and also other agencies, through grant of leave and providing financial incentives.
- iii. Organizing Health Awareness programmes.
- iv. Organization of sports and cultural activities in which all the staff can participate.
- v. Subsidised transport for non teaching staff and faculty
- vi. Free-ships for the children of staff members.
- vii. Maternity leave is given.
- viii. Medical leave to all staff members.
- ix. Financial assistance for higher studies.
- x. Canteen facilities for students and staff.
- xi. Outdoor activities including recreational tours for staff.

6.3.6 What are the measures taken by the Institution for attracting and retaining eminent faculty?

The Institution has the following provisions to attract and retain eminent and talented faculties,

- i. Teachers have the free access to Institutional facilities to carry out research work.
- ii. The college meets all expenditures incurred by the teachers in presenting papers at National and International seminars, registration fees, TA, DA and other expenses including on-duty leave.
- iii. The College funds seed money to short-term and long-term teacher-led student projects.
- iv. College support is provided to teachers who undertake funded projects.
- v. Professors from reputed universities are invited to give guest lectures to enhance the research capabilities of faculty members and PG students.

6.4 Financial Management and Resource Mobilization

6.4.1 What is the institutional mechanism to monitor effective and efficient use of available financial resources?

Every department will prepare the advance budget required for the next academic year in terms of obtaining lab equipment, laboratory facilities and infrastructure and up-gradation of computational systems. The budget plans received from various departments are consolidated and normalized based upon the total income anticipated through the students' tuition fee. Departments are encouraged to obtain grants through consultancies, Seminar / workshop grants from AICTE, UGC etc., While utilizing the funds, the expenditure involved in procuring the equipment is collectively negotiated by a committee consisting of the Executive Manager, Administrator, Principal, Finance Manager, Head of the Department and faculty in-charge for the Laboratory. Staff is also instructed to make use of the equipment for more number of batches within the college time frame work. Inter department coordination is encouraged for the effective usage of lab equipment, seminar halls etc.,

6.4.2 What are the institutional mechanisms for internal and external audit? When was the last audit done and what are the major audit objections? Provide the details on compliance.

The income and expenditure of the institution is audited by M/s Jose and Abraham Chartered Accountants, which is fully external auditing system. There are no major audit objections. For certain minor expenses accounts department will itself act as internal auditing system. The audit reports for the last three years are enclosed as Annexure

6.4.3 What are the major sources of institutional receipts/funding and how is the deficit managed? Provide audited income and expenditure statement of academic and administrative activities of the previous four years and the reserve fund/corpus available with Institutions, if any.

This institution has not experienced with any financial deficit during the last 4 years. Copies of audited income and expenditure statement of academic and administrative activities of the previous four years and the reserve fund/corpus available with Institutions are enclosed herewith.

6.4.4 Give details on the efforts made by the institution in securing additional funding and the utilization of the same (if any).

Loans availed for Infrastructure development of the Institute

Sl No.	Loan availed from	Ref. No.	Amount in lakhs	Year of sanction	Status
1	Federal Bank	IPS	220	2002	Closed
2	Federal Bank	IPS	250	2003	Closed
3	Federal Bank	IPS	280	2004	Closed
4	Federal Bank	IPS	230	2006	Closed

6.5 Internal Quality Assurance System (IQAS)

6.5.1 Internal Quality Assurance Cell (IQAC)

- a. Has the institution established an Internal Quality Assurance Cell (IQAC)? If 'yes', what is the institutional policy with regard to quality assurance and how has it contributed in institutionalizing the quality assurance processes?**

Yes.

This cell has been established on 30-07-2015.

- b. How many decisions of the IQAC have been approved by the management/ authorities for implementation and how many of them were actually implemented?**

Not Applicable

- c. Does the IQAC have external members on its committee? If so, mention any significant contribution made by them.**

No.

- d. How do students and alumni contribute to the effective functioning of the IQAC?**

The institution has set up an IQAC and the functions of this cell is being monitored.

- e. How does the IQAC communicate and engage staff from different constituents of the institution?**

The modalities have to be worked out.

6.5.2 Does the institution have an integrated framework for Quality assurance of the academic and administrative activities? If 'yes', give details on its operationalisation.

Not Applicable

6.5.3 Does the institution provide training to its staff for effective implementation of the Quality assurance procedures? If 'yes', give details enumerating its impact.

This cell has been constituted recently. With respect to modus operandi, it has to be worked out in detail.

6.5.4 Does the institution undertake Academic Audit or other external review of the academic provisions? If 'yes', how are the outcomes used to improve the institutional activities?

Institution has an internal Academic Audit Cell which is involved in the process of helping the faculty members to prepare the teaching plan for each subject and to maintain the log book

specifying the details of the topics taught in the classroom and entering the marks for various tests and daily attendance. The Academic Audit Cell formulated by the institution evaluates both the academic and administrative aspects of all the departments and suggests remedial measures for improvement to boost the work culture of the department and thereby improving the quality of teaching and learning.

Best Teacher Award for best performing teachers in the college.

Financial support for research activities.

Travel grant for attending national/ international conferences, workshops etc.,

The reforms initiated by the college include all the examination records are tabulated and the data is maintained

6.5.5 How are the internal quality assurance mechanisms aligned with the requirements of the relevant external quality assurance agencies/regulatory authorities?

Not Applicable

6.5.6 What institutional mechanisms are in place to continuously review the teaching learning process? Give details of its structure, methodologies of operations and outcome?

It is an institutional mechanism that all the staff have to record the topics covered per session on each day. All the staff are regularly monitoring the attendance and cautioning the students whose

attendance is less than 75%. Class Review Committee meetings are held regularly for all classes to review effectiveness of teaching learning process. In the tutorials, the details of the number of problems worked out and the examples discussed were also recorded. The college monitors the quality of teaching by several means such as

Scrutiny of Course files prepared by faculty.

Regular meetings of the students' representatives of the class and the faculty

Oral and written feedback from the students

Students' performance in the internal examinations

Students' results analysis

Evaluation of teacher's performance is done every semester.

Evaluation of teachers by students:

The college has a feedback system to evaluate the teachers by students. At the end of each semester, the feedback from students is obtained by issuing printed questionnaires relating to all subjects. In this feedback, questions regarding performance of the teachers are sought. Their feedback is analyzed by the concerned Head of the Department. Based on assessment of

performance, Head of the Department gives necessary directions for the improvement in the teaching methods. Principal also monitors the feedback system and takes appropriate corrective actions.

Self appraisal of Faculty Members:

All the faculty members are required to submit self appraisal report every semester in the prescribed format.

Review of faculty self-appraisal final report:

Jyothi has evolved a standard method of evaluating the teaching research and administrative activities of the faculty. The information furnished by the faculty member will be analyzed by the HOD, Principal and the score sheet of each faculty member is prepared.

Academic and Administrative Audit of the Department:

The Academic Audit Cell formulated by the college evaluates both the academic and administrative aspects of all the departments and suggests remedial measures for improvement to boost the work culture of the department and thereby improving the quality of teaching and learning. Teaching and learning process is best attained by interactive process between the teacher and the taught. The success of the teacher however, depends on their innate ability and art of his teaching methodology and through preparation for the class. These processes cannot be quantified or universalized. Generally, the standard methods of teaching - learning and evaluation methods - which are proven over the years are being followed. College makes regular effort to enhance the staff skills and their ability by organizing in house- training programs and or deputing the staff to get training in communication skills and other areas of standard methodology. The staff in whose subjects more than 10 students fail are counselled by the Head of the Department/Principal. Any short comings identified in theory class or practical are being addressed through guest lectures/conducting tutorials/printing reference materials (literature or teaching).

6.5.7 How does the institution communicate its quality assurance policies, mechanisms and outcomes to the various internal and external stakeholders?

The quality, mission and vision policies are displayed at all the prominent places to remind the staff and students continuously. To match the quality policy and based on the latest industrial requirements the syllabi is taught and wherever required additional staff or infrastructure is provided.

Program Educational Objectives and Program Objectives are displayed at prominent places in the college and included in the letters to the parents which are sent every month. The same is being informed to the external stakeholders mainly companies coming for recruitment, concerned university authorities, peer organizations are informed.

Any other relevant information regarding Governance Leadership and Management which the college would like to include.

Following are the best practices followed by the college:

Clearly defined vision and mission of the college

Clearly defined duties and responsibilities of all concerned

Democratic functioning with transparency in administration

Interactions through committee's systems with colleagues, superiors and administrators. Recruitment of sufficient quality faculty for all programs through transparent procedures. Effective utilization of resources of special equipments, infrastructure, man power between the departments. Committed approach of the institution toward downtrodden and rural masses.

Effective internal co-ordination has been formed for achievement of goals set by the college. The infrastructure is provided to Co-curricular activities, Social Service Activities & Sports.

At the beginning of each academic year, the college prepares in advance the programmes to be conducted in Academic calendar. It helps to streamline the organization and efficiently execute programmes.

To ensure time management and efficiency, each teacher prepares in advance the monthly teaching plan as per the subject allotted.

For better coordination and avoiding conflicts, academic co-ordinator is appointed to bring about better efficiency in conducting the academic programmes.

Various committees have been formed for the smooth functioning of institutional work. Financial support has always been made available for the academic activities of teachers and students.

Good library and internet facilities are made available to teachers and students.

In order to ensure the regularity and accountability, the college has developed the system of maintaining the lesson plan.

The teacher is required to note down the portion covered for every subject taught daily in the said lesson plan.

The Principal checks these records weekly.

Adoption of an Institutional vision which is in line with the National policies in higher education.

Decentralization of administrative functions.

Implementation of measures towards computerization of office functions.

Maintaining transparency in all aspects of the College

Additional functioning through a process of broad-based consultation and involvement of stakeholders in implementation.

CRITERION – VII

**INNOVATIONS AND BEST
PRACTICES**

CRITERION-VII

INNOVATIONS AND BEST PRACTICES

7.1 Environmental Consciousness:

The college is conscious of environmental issues. It tries to create environmental awareness among the stakeholders. The college authorities are very keen on making the campus eco-friendly by adopting certain measures. The college also adopts energy conservation practices, effective waste management at source and plantation for making the campus clean, green and healthy.

7.1.1 Does the Institute conduct a Green Audit of its campus and facilities?

A natural light audit of the main building of the Institute was carried out in the year 2011-12 by Prof. S. S. Varur. The scope, status and short-falls in existing light energy scenario of the Institute were identified. All the class-rooms, laboratories, offices were audited for light fixtures and their efficiencies, availability of day light or the absence of it, comprising with Indian standard norms for good visual lighting. Other factors contributing to lighting were studied and suitable remedial measures were suggested. 1) Among these measures, the old opaque FRP sheets were changed to more transparent poly carbonate sheets. 2) Retrofitting of M.S. windows with aluminum sliding windows was carried out some locations. 3) Old T12 tube lights are progressively being replaced by T5 tube lights.

7.1.2 What are the initiatives taken by the Institute to make the campus eco-friendly?

Energy Conservation:

1. Each block of the college has individual power control panels and energy meter installations, which help in separate and effective monitoring and control of energy consumption.
2. The UPS batteries are maintained in good condition which reduces energy for charging of batteries.
3. Energy conserving lights like CFL, T5 tube lights and LED are used in the Institute campus.

Environmental Awareness Campaigns:

Every year, the college organizes and celebrates the following programs through its NATURA Environmental Forum.

World Water Day:

World water day is celebrated every year on 22nd March by the people across the world. To achieve the goal of creating awareness regarding water conservation, every year various competitions, photo exhibitions and different programs are conducted which includes essay writing.

Poster presentation, T-Shirt painting, face Painting etc. on the theme of water management, water pollution and water literacy. Informative guest lecturers are conducted by inviting experts from local areas.

Ozone Day:

Since 2011, the college, on 16th September, celebrates the international ozone day, as per the declaration of United Nations General Assembly for preservation of the ozone layer. The college conducts specific activities in accordance with the objectives and goals of ozone day, which involves pledge by students to become responsible citizen.

Earth Hour Day:

Earth hour is a worldwide grass root movement uniting people to protect the planet and is organized by WWF. It is celebrated on every 29th March between 8:30 and 9:30 PM. The college follows this one hour shutdown of light strictly in the whole campus. The college encourages their students to celebrate the earth hour day.

Rain Water Harvesting

The college campus has a large built up area to harvest rainwater. Rainwater harvesting is being done in step by step manner. Presently the roof top of the Boys hostel building is used as the catchment area to harvest rain. In addition to this, a pond with a capacity of 10^7 litres has been constructed at a cost of Rs. 50 lakhs for rain water harvesting. The next proposed areas are Girls hostel roof top, Jyothis' main building etc. The present system is the collection of rainwater from the top of Boys hostel which is discharged into the soil. By implementing this, a rise in the water level is observed in the well which exists in the campus.

Check dam construction

The college has an excellent topography for watershed development. By using different soil and water conservation techniques, huge quantity of rainwater is conserved. Land and water conservation practices which are made within the college campus include construction of contour bunds, soil moisture conservation practices which protect the land degradation, improve soil health and increase soil-moisture availability and ground water recharge.

Following measures are taken in the campus to increase the groundwater recharge to percolate the stored water.

- 1) Continuous Contour trenches with tree plantations on all possible existing slopes.
- 2) Gully plugging.

By implementing the above watershed technologies, the ground water table as well as the water level in the existing well has increased. Thus, it has satisfactorily fulfilled the water needs and reduced the dependency on present water supply scheme throughout the year.

Efforts for Carbon neutrality/ Carbon Sequestration

Carbon footprint is a measure of the impact of our activities on the environment, and in particular climate change. It relates to the amount of greenhouse gases produced in day-to-day lives through burning fossil fuels for electricity, heating and transportation, etc. It is necessary that we take remedial actions to reduce the primary and secondary footprints which due to CO₂ emission lead to increase in temperature of the planet.

Case of Jyothi Engineering College

Total Area= 36.717 acres, among which 70% green cover is present.

About 1% area is covered with a water body.

These are the two sources which act as a sink for reduction in CO₂ levels in the atmosphere.

1. Tree plantation

The JEC campus is enriched with the various types of trees. Different types of trees are planted within the college premises. The major area where the tree plantation coverage

happens is college campus, girls' hostel, boys' hostel, and periphery of the college play ground.

2. Vehicular exhaust

The college is established in a village where the traffic is minimum. However, there will be emissions from bikes, cars as well as buses. By taking this into consideration, the various types of plants have been planted so that they can obstruct the movement of contaminant or pollutants coming to the college as a receptor. Periodic tree plantation as well as Environmental Awareness programmes are conducted by the college through NATURA Environmental Forum. This not only includes emphasizing mass tree plantation but also assigns the task of maintenance of individual plant to individual student or entity.

3. Plantations

The college has an ex-situ conservatory of medicinal plants named as AYURJYOTHI. Plants of various species have been planted in the campus and in the periphery of the play ground.

AYURJYOTHI was established in 2012. The garden has an Asoka tree planted by Hon. Dr. Manmohan Singh, Former Prime Minister of India. Plants are maintained and monitored

properly. These medicinal Plants include the plants which are on the verge of extinction. So to take care of environmental consciousness, the college authorities decided to increase the number of some highly endangered plants.

List of Medicinal Plants planted in the College

Sl No.	Common name of the plant	Botanical name
1	Asokam	Saracaasoka
2	Brahmi	Bacopamonneri
3	Kanikonna	Cassia fistula
4	Thulasi	Ocimumtenuiflorum
5	Chittamruthu	Tinosporacordifolia
6	Karunechi	Vitexnegundo
7	Rakthachandanam	Pterocarpussantalinus
8	Ungu	Pongamiaglabra
9	Venga	Pterocarpus marsupium
10	Sangupushpam	CLITORIA TERNATEA
11	Adalodakam	ADHATODAVASICA
12	Mathalanaragam	Punicagranatum
13	Kacholam	Kaempferiagalanga
14	Athi	Ficusracemosa
15	Ezhilampala	ALSTONIASCHOLARIS
16	Koovalam	Aegle mermelos
17	Kumil	Gmelinaarborea
18	Changalamperanda	CISSUSQUADRANGULARIS
19	Aatha	Annona squamosa
20	Dandapala	Wrightiatinctoria
21	Ayyappana	Eupatorium ayapana
22	Chakkarakkolli	Gymnemasylvestre
23	Naagadandi	Baliospermummontanum
24	Pathimugham	Caesalpiniasappan
25	Moovila	Pseudarthriaviscida
26	Iluppa	Madhucalongifolia

27	Vathamkolli	<i>MURDANNIANUDIFLORA</i>
28	Naykuranna	Mucunapruriens
29	Karingali	Acacia catechu
30	Kurumulagu	Piper nigrum
31	Mandaram	Bauhinia acuminata
32	Thaanni	Terminalia bellerica
33	Puliyarila	Oxalis corniculata
34	Chandanam	Santalum album
35	Chathuramulla	Myxopyrumserratum
36	Plassu	Butea monosperma
37	Chethi	Ixoracoccinea
38	Chunda	Solanumsurattense
35	Naaragam	Melissa officinalis

Tree planting was done by a team of teaching and non teaching staff in the campus to make it greener.

Gardens and grass lawns are developed and maintained.

Hazardous waste management

In the Chemistry Laboratory, several experiments are performed using hazardous chemicals and potent carcinogens like Potassium ferrocyanide, inflammable chemicals etc. Therefore, precautionary measures are taken for proper handling and disposal of hazardous chemicals to avoid possible accidents, thereby creating a safe working environment.

a) Precautionary Measures:

- 1) Food in the laboratory is prohibited as hazardous chemicals are present.
- 2) In any emergency, eyewash is immediately accessible.
- 3) The laboratory is equipped with exhaust fans to expel fumes and gases formed during experimentation.
- 4) To prevent the spread of this or other chemicals outside the laboratory, users wash their hands thoroughly with soap and water
- 5) Gels containing poisonous chemicals are collected separately in sealable disposable plastic containers with lids.
- 6) The Hazardous chemicals are under the custody of the Store Keeper and are issued only under strict supervision and sanction.

e-waste management:

The different types of e-waste generated in the college like damaged C.D.s, C.P.U.s., Hard Disk Drives, Monitors, Keyboards, Cables, Cartridges, etc. are collected together and handed over to an external e-waste recycling agency.

7.2 INNOVATIONS:

7.2.1 Give details of innovations introduced during the last four years which have created a positive impact on the functioning of the college.

- a. Value Added Training Programs for Civil engineering students in Total Station for Academic Collaboration and Engagement, which is also useful for campus placements of students.

Objectives of Training on Total Station

To train the students in carrying out a complete and advance survey.

The purpose of these activities is to identify students who are academically sound, and are passionate and interested in the training. After the students are identified, our practice teams help the students understand the kind of work involved by conducting lectures and engaging them in projects. Our team ensures that the students are well trained. This not only helps the students connect and engage with the JEC brand, but also guarantees a certain level of maturity and knowledge in them that is otherwise hard to find in fresh students.

- b. Innovation by Departments of I.T. and C.S.E.:

An MOU with Cosmic Power Solutions has been signed. The Training offered to the students under the MOU is Firmware and Software Support.

Patents: Nil

7.3 Best practices:

7.3.1 Elaborate on any two best practices which have contributed to the achievement of the Institutional Objectives and/or contributed to the Quality improvement of the core activities of the Institute.

A) Best Practice No.1:

1) Title of the Practice: Online Students Feedback System

2) Goal:

To receive an online feedback from students about teachers, facilities and resources provided to them.

To bridge the communication gap between students and teachers.

To provide an opportunity to teachers to enhance their teaching skills.

To receive suggestions from students for strengthening the teaching - learning process and overall academic environment.

3) The Context:

Teachers prepare for the classes they conduct throughout the semester. But, sometimes they might not give much thought to methods of conveying a topic to the students. In that case, even though the teacher is knowledgeable, competent and sincere, his efforts in communicating a topic to students go in vain. Unless such matters are brought to the notice of the concerned teacher, he/she cannot bring necessary changes into his/her teaching style. That is why the Students' Feedback System came into existence in our college. Secondly, students are continuously evaluating the facilities and resources provided by the college. In fact, they are the best critics as they are the end users. This includes the library facility, transport, Internet, Wi-Fi, even drinking water and cleanliness of the campus. To utilize these facilities efficiently, suggestions from students are very useful. We also ask students to give suggestions in this regard while conducting the feedback.

4) The Practice:

- a. Feedback is conducted twice a semester- Formative (in the mid of semester) and Summative (at the end of semester).
- b. The feedback is taken through software, developed in-house. There is a central feedback coordinator and also a coordinator at the department level. The central coordinator is responsible for sending timely notices to Heads of the Departments and coordinators regarding the feedback activity and also for generating reports and sending them to the Principal and the Heads of the Departments. The feedback dates are fixed when the Academic Calendar is prepared. Generally a feedback is conducted in 2-3 days. The department level coordinators look after smooth conduction of the activity.
- c. Students give the feedback by anonymously logging into the software. This encourages students to a give free and fair feedback. Students are presented with a questionnaire which they answer by selecting appropriate options. The questionnaire mainly concentrates on teaching-learning aspect of the feedback. The questionnaire is followed by a comment section where students can give their suggestions.
- d. Immediately after the feedback, faculty members can log into the software and check numerical value of their feedback. The Head of the Department can check the feedback reports
- e. pertaining to his/her department. The Principal can check feedback reports of all departments. The Principal discusses the reports in his meeting with the Heads of the Departments rigorously. In the meeting, they prepare an action plan based on the feedback and suggestions

received from the students. Heads of the Departments, in turn, communicate the action plan to respective faculty members.

- e. Based on the feedback report, proactive actions are taken. Those whose scores are low, are given appropriate guidance for improvement.

5) Evidence of Success:

- a. A teacher receives the feedback for a subject based on a questionnaire containing 20 questions with respect to theory part and 10 questions for laboratory part. For each question, a teacher is graded as poor, fair, good, very good and excellent. After receiving the feedback, a teacher comes to know about the areas he is lagging in. He / She then makes deliberate efforts for improving in those areas.
- b. The college campus is Wi-Fi enabled since last one year. This is a result of constant demand from students through the feedback system.
- c. The Internet speed is upgraded to 16Mbps.
The demand was made by the students through the feedback system.

6) Problems Encountered and Resources Required:

Students can give suggestions of the feedback activity. It should be possible for students to give suggestions any time throughout the semester.

7) Future Plans:

- a. To add modules to the software to take feedback from alumni of the college as suggestions and feedback received from them is a valuable input to accelerate the growth of the college.
- b. To add to the software, the exit feedback from the outgoing students.

B) Best Practice No.2:

1. Title of the Practice: Best Outgoing Student Award

2. Goal: Every Academic Year, the college felicitates the Best Student amongst the Final Year students of all UG Programmes.

1. The Context:

The Final Year students submit the information regarding their achievements during the four academic years spanning from First Year to Final Year. The Academic Excellence achieved by the candidates during each Semester University Examinations is a major criterion. The Performance of all the candidates is also judged for Organizing Skills, participation in Co-curricular / Extra

Curricular Activities, Sports, Paper presentation at National and International Conferences, and National and International Journals. The Performance of the candidates in Competitive Examinations and participation of candidates in Social Work for Community are also considered. Placement of the candidate in any reputed company is also a criterion for comparison.

2. Challenging Issues:

Comparing the Academic Excellence of the students of different Programmes

For each programme, the number of colleges offering the same programme and the number of students enrolled is different. For Example: Computer Science and Engineering Programme or Electronics and Telecommunications Programme are available in several colleges in the University and nearly 10,000+ students appear for the University End Semester Examinations. So the toppers are amongst 10000+ students. While for Civil Engineering, the Programme is available in only 60% colleges in the University and nearly 6000+ students appear for the

University End Semester Examinations. So the toppers are amongst 6000+ students only. Hence as the syllabus for the First Year is common for all Programmes the performance of the candidates can be compared and credits are given for being University Topper.

1. The Practice:

The Final Year students submit the information regarding their achievements during the four academic years spanning the first Year to final year. The various criteria considered for the Best Student award are as follows.

The credits are given for Academic Excellence achieved during each semester University examinations. Credits are also given for University rank achieved in first year of Engineering as all students have common syllabus in the first Year. The performance of all the candidates is judged for Organizing Skills, participation in Co-curricular Activities, Extra Curricular Activities, Sports, Paper presentation at National and International Conferences, and publications in National and International Journals. The Participation of candidates in Social Work for Community is also considered as one of the criterion. The Performance of the candidate in Competitive Examinations and placement of the candidate is also considered as one of the criterion. Credits are also given for the Personal Interviews of the nominated candidates. The Interviews are conducted by a committee comprising of Principal, Best Outgoing Student Award Committee Coordinator and few senior faculty members.

2. Evidence of Success:

The Best Outgoing Student Award is a Best Practice implemented by our institute for nearly last 12 years. The Winners of the Best Outgoing Student Award have always undergone Post Graduate Studies in India and abroad, well placed in reputed multinational companies and flourished in their life.

3. Problems Encountered and Resources Required:

Problems Encountered: Verification of authentication of achievements in various Criterion by the candidates.

Resources Required:

Panel of experts.

Original certificates for verification.

Certifications by concerned authorities such as Head of the Department, Sports Coordinator, etc.

A detailed description of the activities undertaken recently for the local community and Swachh campus is given below which has been submitted as nomination for Swachh campus and Swachh Vibhag awards 2014-15 of the Calicut University

**PROPOSAL FOR
SWACHH CAMPUS AND SWACH VIBHAG
AWARDS 2014-15**

Submitted by



Jyothi Engineering College 
Approved by AICTE and affiliated to the University of Calicut
A CENTRE OF EXCELLENCE IN SCIENCE & TECHNOLOGY BY THE CATHOLIC ARCHDIOCESE OF THRISSUR

**Jyothi Hills, Vettikattiri P O
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PROPOSAL FOR

SWACHH CAMPUS AND SWACH VIBHAG AWARDS 2014-15

INTRODUCTION

In recent years, the progress in science and technology is amazing. The progress meets the needs of the world while they change it too. The adverse effects of the development viz. environmental degradation, ruthless waste disposal, brutal use of plastics, irrational water usage, unutilization of solar energy, appalling life style etc. are horrifying. It is in this context, the significance of environmental conservation and protection, effective waste management and recycling, plastic free environment, rain water harvesting, utilization of solar energy, physical activities for a healthy life, promotion of alcohol and drug free life style etc. and thus Swachh Campus receives a prominent importance.

The Jyothi Engineering College was established in 2002 and started functioning with 4 disciplines, namely Electronics and Communication, Electrical and Electronics, Computer Science & Engineering and Information Technology. The departments of Mechanical Engineering and Applied Electronics and Instrumentation were added in 2004 and 2006, respectively. Additional batches in Mechanical Engineering, Electronics and Communication and Computer Science & Engineering were started in for 2011 and 2013, respectively. M. Tech. programmes in Electrical and Electronics and Computer Science & Engineering were also started in 2012. The college has a student strength of 1761 and a staff strength of 197 in addition to those engaged on daily wage basis.

During the last 13 years since its blossoming, this educational institution, has accomplished the aspirations in the environment protection and conservation, promotion of alcohol and drug free life style, swachh campus, physical activities for a healthy life as per the credentials below. This institution has deemed to have redeemed substantially to the society to protect and conserve the ecology and environment, with robust ethical ethos to be leaders and contributors to every segment of the Indian society.

Jyothi campus is spread over an area of 25.818 acres at Jyothi Hills, Cheruthuruthy, very close to Kerala Kalamandalam, the cultural University of Kerala, just 500 meter from Vallathol Nagar Railway station, 4 km from Shornur Railway junction and 28 km from Thrissur.

The central campus stretches out end to end by landscaped stretches. Jyothi's high rising structures amalgamate the strength and sophistication of the contemporary with the immaculate

serenity and mellowed loveliness of rustic simplicity - a unique topographic amalgam dappled with lawns, courtyards, walkways, multi-colored umbrella-study-shelters and flower laden arches.

ACTIVITIES

NATURA

Jyothi Engineering College has an environmental forum known as NATURA. The members of the forum are students with keen interest in environmental conservation and protection. The forum aims at attaining a clean and environment today, tomorrow and forever. The forum has conducted several activities as part of academics. In the year 2014, the activities of the forum was inaugurated by Dr. V. S. Vijayan, Former Chairman, Kerala State Biodiversity Board. He gave a talk on the necessity of conserving nature and the recent trends in environmental protection. Seedlings of bamboos and canes were planted by the chief guest and the Principal. A bioshield with bamboos has been established in the college with bamboos in association with Kerala Forest Research Institute, Peechi and are being looked after by the members of NATURA.



Inaugural function of NATURA environmental forum- 2014



Dr. V. S. Vijayan planting seedlings of bamboos

Dr. K. K. Babu, Principal planting seedlings of bamboos



ജ്യോതി എൻജിനീയറിംഗ് കോളജിൽ വിവിധയിനം മുളകളുടെ തൈകൾ നട്ട് ജൈവകവചം സൃഷ്ടിക്കുന്നതിന്റെ ഉദ്ദേശ്യം കേരള സ്റ്റേറ്റ് ബൈയോഡൈവേഴ്സിറ്റി ബോർഡ് ചെയർമാൻ ഡോ. വി.എസ്. വിജയൻ നിർവഹിക്കുന്നു. സയറിന്റേസ് ഡോ. ടി.വി. സജീവ്, മാനേജർ ഫാ. ജോസ് പുനോലിപ്പറമ്പിൽ തുടങ്ങിയവർ സമീപം.

മുളകളുടെ ജൈവ കവചത്തിനു ജ്യോതി ഒരുങ്ങുന്നു

ചെറുതുരുത്തി: ജ്യോതി എൻജിനീയറിംഗ് കോളജിൽ വിവിധയിനം മുളകളുടെ മുപ്പത്താലു തൈകൾ നട്ട് ജൈവകവചം സൃഷ്ടിക്കുന്നതിന്റെ ഉദ്ദേശ്യം കേരള സ്റ്റേറ്റ് ബൈയോഡൈവേഴ്സിറ്റി ബോർഡ് ചെയർമാൻ ഡോ. വി.എസ്. വിജയൻ നിർവഹിച്ചു. കോളജിലെ 'നാച്യുറ' ക്ലബിന്റെ ആഭിമുഖ്യത്തിൽ സംഘടിപ്പിച്ച ജൈവകവചനിർമ്മാണത്തിന് കേരള ഫോസ്റ്റൽ സർ

ച്ച് ഇൻസ്റ്റിറ്റ്യൂട്ടിന്റെ സഹായത്തോടെ ആരംഭം കുറിക്കുകയാണ്. കെഎഫ്ആർഐ സിനിയർ സയറിന്റേസ് ഡോ.ടി.വി.സജീവ് ജൈവകവചത്തിന്റെ ആവശ്യകതയെക്കുറിച്ച് കൂട്ടിക്കളെ ബോധവൽക്കരിച്ചു. എൻജിനീയേഴ്സാണ് മുഖ്യയുടെ കാവലമുള്ളതെന്ന് അധ്യക്ഷത വഹിച്ച കോളജ് എക്സിക്യൂട്ടീവ് മാനേജർ ഫാ. ജോസ് പുനോലിപ്പറ

മ്പിൽ അഭിപ്രായപ്പെട്ടു. പ്രിൻസിപ്പൽ ഡോ. കെ. ബാബു, അഡ്മിനിസ്ട്രേറ്റർ ബോബി പിറ്റർ, പ്രഫ. കെ.സി. ജോൺ എന്നിവർ പ്രസംഗിച്ചു. ഫാ.തോമസ് ജോസഫ് വടക്കൻ, ഡോ. ബാലാശ്വര ഫാലൻ, മഞ്ജു മനോഹർ എന്നിവരുടെ നേതൃത്വത്തിലാണു ജൈവകവചം ഒരുങ്ങുന്നത്. ചടങ്ങിൽ വിവിധതരം വൃക്ഷതൈകൾ വിതരണം ചെയ്തു.

Many articles in connection with Natura are being displayed in the college notice board, Jyothi Journal, once in 15 days. Models regarding Global Biogeochemical cycles were displayed by students. Two handwritten magazines The Road Back to Nature – a collection of Glimpses of

Environment and capturing Secrets of Environment were prepared. A short movie related to environmental pollution and conservation was made. Web page of Natura Environmental Forum has been included in the college site. The student members were encouraged to participate in seminars related to environment and present papers. Four students have presented papers in two such seminars.

As part of national Cleanliness Day Programme, Natura Forum members carried out plastic cleanliness drive within the campus and the entire plastic waste sent for recycling. The entire Jyothi family took a pledge to safe guard mother nature and also **Say No to plastic Bags**. The members distributed paper bags to neighbouring houses, shops and Police station.



Articles displayed in the Notice Board Jyothi Journal



Campaign on Say No to plastics



Distribution of paper bags to students



Distribution of paper bags to neighboring houses and shops

Notice Distributed to public to give awareness and promote use of paper, cloth and jute bags.

JYOTHI ENGINEERING COLLEGE

പരിസ്ഥിതി ദിനാഘോഷ പരിപാടികളുടെ ഭാഗമായി ജ്യോതി എൻജിനീയറിംഗ് കോളേജിൽ ചേർന്ന ബാഗുകൾ വിതരണം ചെയ്തു. "പ്ലാസ്റ്റിക് ഉപേക്ഷിക്കൂ, പരിസ്ഥിതിയോടിണങ്ങൂ".

പ്ലാസ്റ്റിക് മരണ വസ്തുവിന് ധാരാളം ഉപയോഗങ്ങളുണ്ട്. മരണാൽ പ്ലാസ്റ്റിക് ദുരൂഹ ദുരവ്യാപകമായ ദോഷങ്ങളും ചെയ്യുന്നുണ്ട്. വർഷങ്ങളോളം പ്ലാസ്റ്റിക് ഭൂമിയിൽ അഴുകാതെ കിടക്കുന്നു, അതിലെ രാസവസ്തുക്കൾ മണ്ണിന്റെ ഘടനയും, ഫലപുഷ്ടിയും നഷ്ടപ്പെടുത്തുന്നു. ഭൂഗർഭജല സംവിധാനത്തെ താറുമാറാക്കുന്ന പ്ലാസ്റ്റിക് ഭാവിയിൽ ജലക്ഷാമത്തിനും കാരണമാകും മൺ ശാസ്ത്രം പറയുന്നു.

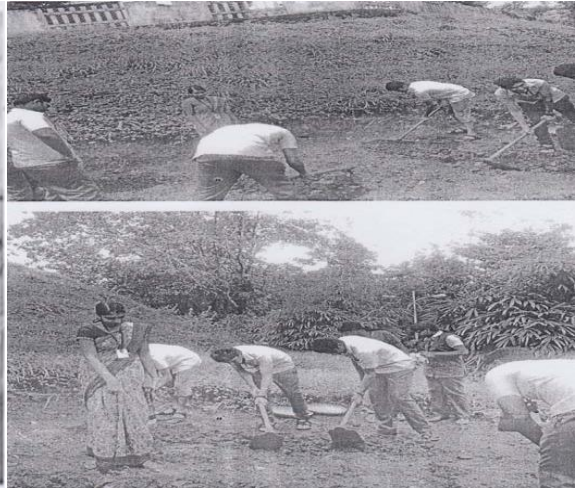
Say no to plastic and use papers Bags.

Notice distributed to public

Natura Environmental Forum conducted a debate on Kasthurirangan Report on 18 March 2014.



Debate on Kasthurirangan report



Students cleaning the campus

Environmental day celebrations

The environment day celebrations of the college for the year 2014 was inaugurated by Dr. B. Sajeev, Senior Scientist, KFRI, Peechi on on 4th July. In his inaugural speech, he cautioned about the environmental degradation and the necessity of waste recycling and abuse of plastics. As part of the programme, different species of bamboos (21 species) and mahogany seedlings were planted in the campus as well as in the play ground. Saplings of gooseberry were planted in the campus by the students and given to students. The students were also given seedlings of various species. The students were encouraged to participate in many environmental education programme.



**Dr. B. Sajeev, Chief Guest
planting seedlings of bamboos**



**Fr. Jose Punnoliparambil, Executive Manager
planting seedlings of bamboos**

Dr. K. K. Seethalakshmi, Emeritus Scientist, IRTC, Mundur inaugurated he environment day celebrations of the college for the year 2015. In her message, she cautioned the adverse effect of global warming, the necessity of environment conservation and protection, carbon sequestration and the ecosystem functioning of bamboos, their propagation and uses. The college proposes to plant 400 seedlings of various species in the campus which will be looked after by the volunteers of Natura Club.



Dr. K. K. Seethalakshmi, Emeritus Scientist, IRTC, Mundur inaugurating the 2015 Environment day celebrations by planting a seedling of sandal

Establishment of ex-situ conservatory of medicinal plants

The college has established a medicinal plants garden on 5 June 2010. Seedlings of several medicinal plants were distributed to the students with the objective of motivating students to plant trees. The students have prepared a handwritten magazine, *Materia medica* – a book of ayurvedic medicines. The college has established an ex-situ conservatory of medicinal plants in collaboration with Oushadi. There is also a Nakshthra vanam in the medicinal plants garden. This garden has around 23 species of various important medicinal plants. The following medicinal plants have been introduced as part of ex-situ conservatory in June 2015. The function was inaugurated by Sri. M. Muralidharan, Secretary, PNNM Ayurveda Medical College

Sl No.	Common name of the plant	Botanical name
1	Asokam	Saraca asoka
2	Brahmi	Bacopa monnieri
3	Kanikonna	Cassia fistula
4	Thulasi	Ocimum tenuiflorum
5	Chittamruthu	Tinospora cordifolia
6	Karuneechi	Vitex negundo
7	Rakthachandanam	Pterocarpus santalinus
8	Ungu	Pongamia glabra
9	Venga	Pterocarpus marsupium
10	Sangupushpam	CLITORIA TERNATEA
11	Adalodakam	ADHATODA VASICA

12	Mathalanaragam	<i>Punica granatum</i>
13	Kacholam	<i>Kaempferi agalanga</i>
14	Athi	<i>Ficus racemosa</i>
15	Ezhilampala	<i>ALSTONIA SCHOLARIS</i>
16	Koovalam	<i>Aegle mermelos</i>
17	Kumil	<i>Gmelina arborea</i>
18	Changalamperanda	<i>CISSUS QUADRANGULARIS</i>
19	Aatha	<i>Annona squamosa</i>
20	Dandapala	<i>Wrightia tinctoria</i>
21	Ayyappana	<i>Eupatorium ayapana</i>
22	Chakkarakkolli	<i>Gymnema sylvestre</i>
23	Naagadandi	<i>Baliospermum montanum</i>
24	Pathimugham	<i>Caesalpinia sappan</i>
25	Moovila	<i>Pseudarthria viscida</i>
26	Iluppa	<i>Madhuca longifolia</i>
27	Vathamkolli	<i>MURDANNIA NUDIFLORA</i>
28	Naykuranna	<i>Mucuna pruriens</i>
29	Karingali	<i>Acacia catechu</i>
30	Kurumulagu	<i>Piper nigrum</i>
31	Mandaram	<i>Bauhinia acuminata</i>
32	Thaanni	<i>Terminalia bellerica</i>
33	Puliyarila	<i>Oxalis corniculata</i>
34	Chandanam	<i>Santalum album</i>
35	Chathuramulla	<i>Myxopyrum serratum</i>
36	Plassu	<i>Butea monosperma</i>
37	Chethi	<i>Ixora coccinea</i>
38	Chunda	<i>Solanum surattense</i>
35	Naaragam	<i>Melissa officinalis</i>



. Inauguration of planting in ex-situ conservatory of medicinal plants by Sri. M. Muralidharan, Secretary, PNNM Ayurveda Medical College



Members of Natura Club tending the plants



Members of Natura Club weeding the garden and watering the plants



National Service Scheme

There is a NSS unit in the college. This unit aims at developing student’s personality through community service and it is a voluntary association of young people in the colleges, Universities and + 2 level working for a campus-community linkage. The cardinal principle of the NSS programme is that it is being organized by the students themselves, and both the students and

teachers through their combined participation in community service, get a sense of involvement in the tasks of nation building. It gives opportunity to students to interact with society, teaches dignity of labour, develops personality, enhances cultural and artistic talents.

The college has a unit of 100 volunteers from second and third year B. Tech students. In the year, 2014, a group of volunteers cleaned the Vallathol Nagar Railway Station on 2 October. The programme was done under the guidance of the Station Master. The volunteers removed all the plastic bottles, covers and cans from the platform as well as railway track. They also cleaned the platform, the toilets, bathrooms and the surroundings of ticket counter. The volunteers also cleaned the nearby premises of the college. In addition, the volunteers removed all the waste and debris from the road sides belonging to Panchayath and State highway. The college arranged a NSS camp at Government High School, Panjal for 10 days on personality development and social commitment from 22nd August 2015.



A view of the cleaning programme in the Taluk Hospital,
Wadakanchery



Procession in connection with
N S S Camp @ Govt. High School, Panjal



Inauguration of N S S Camp @ Govt. High School, Panjal



Participants of N S S Camp @ Govt. High School, Panjal

A blood donation camp was organized under the auspicious of NSS. Eye testing was also organized as opart of the 10th anniversary of the college. The volunteers also cleaned the premises of the Taluk Hospital, Wadakkanchery.



A view of the cleaning programme in the railway platform at Vallathol Nagar



A View of the Blood Donation Programme

has established in the ladies hostel for the management of napkins, an incinerator which not only prevents the blocks in the sewage line but also effectively manages the waste.



A view of Sanitary napkins disposal through Napiburns

Healthy life style

The members of the NATURA forum visited Jeevodaya Hospital, Chelakkara to give awareness message on the importance cleanliness inside the house and in the surroundings, to avoid junk food to be healthy and promote blood donation.

Anti narcotic cell

Under the auspicious of the Anti-Narcotic Cell, Govt. of Kerala the World Narcotic Day activities were held on the campus on 26.06.2014. Prof. C.V Varghese of St. Thomas College, Thrissur spoke to the students on the damage caused by the use of Narcotics. The students have also taken an oath against the use of drugs and alcohols.



Taking the pledge against the use of drugs

Conclusion

Thus, the college has given prominence from the time of its inception to ecosystem conservation, protection of the environment, healthy life style, awareness to the students on the adverse effect of the smoking and use of drugs and alcohols, rain water harvesting and effective waste management. In future various projects like one tree for one student, construction of eco-friendly buildings etc. are in the offing.

4. Contact Details:

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SELF STUDY REPORT

Submitted to

**NATIONAL ASSESSMENT AND ACCREDITATION COUNCIL
(NAAC)**

An Autonomous Institution of the University Grants Commission
P.O. Box No.1075, Nagarbhavi, Bangalore - 560072

by



ESTD 2002

JyothiEngineering College

Approved by AICTE & Affiliated to APJ Abdul Kalam Technological University

A CENTRE OF EXCELLENCE IN SCIENCE & TECHNOLOGY BY THE CATHOLIC ARCHDIOCESE OF TRICHUR

JYOTHI HILLS, VETTIKATTIRI P.O., CHERUTHURUTHY, THRISSUR PIN - 679531 PH: +91 - 4884 - 274198, 274423 FAX : 04884 - 274777

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PART - D

DEPARTMENT
EVALUATION REPORTS



DEPARTMENT OF CIVIL ENGINEERING

Evaluation Report of the Department

1. Name of the Department : Department of Civil Engineering

2. Year of establishment : 2012

3. Is the Department part of a School/Faculty of the university? No.

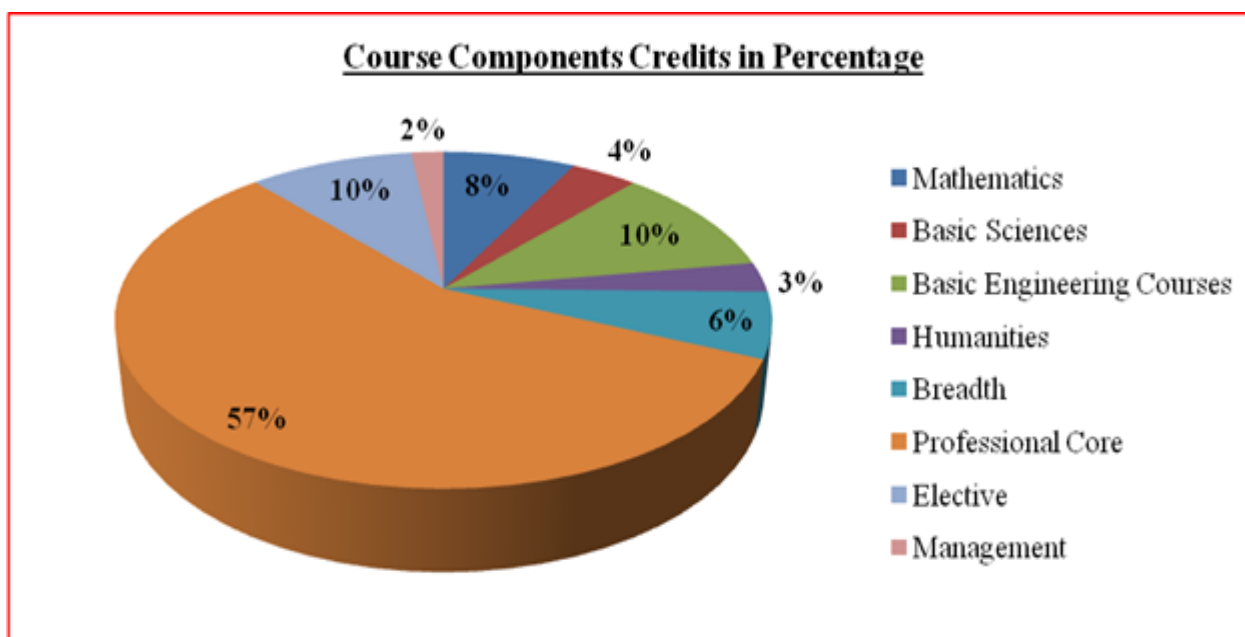
4. Names of programmes offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., D.Sc., D.Litt., etc.) : UG

Courses offered

Sl No.	Courses offered	Intake	When started	Specialisation
1	B. Tech	60	2012	Civil Engineering

5. Interdisciplinary programmes and departments involved

Sl No.	Names of Interdisciplinary courses	Department involved
1	Engineering Mathematics I	Basic Science & Humanities
2	Engineering Mathematics II	Basic Science & Humanities
3	Engineering Mathematics III	Basic Science & Humanities
4	Engineering Mathematics IV	Basic Science & Humanities
5	Engineering Physics	Basic Science & Humanities
6	Physics Lab	Basic Science & Humanities
7	Engineering Chemistry	Basic Science & Humanities
8	Chemistry Lab	Basic Science & Humanities
9	Engineering Mechanics	Civil & Mechanical
10	Basics of Civil & Mechanical Engg	Civil & Mechanical
11	Basics of Electrical, Electronics & Communication Engg	Electrical, Electronics & Communication Engg
12	Engineering Graphics	Civil/Mechanical
13	Computer Programming in C	Computer Science
14	Mechanical workshop	Mechanical
15	Electrical & Civil Workshop	Electrical & Civil
16	Humanities & Communication Skills	Basic Science & Humanities
17	Environmental Science	Civil Engineering
18	Mechanical Engg	Mechanical
19	Mechanical Engg Lab	Mechanical
20	Engg Economics & Principles of Management	Basic Science & Humanities



6. Courses in collaboration with other universities, industries, foreign institutions, etc. Nil

7. Details of programmes discontinued, if any, with reasons: Nil

8. Examination System: Annual/Semester/Trimester/Choice Based Credit System : Semester

B. Tech programme	
I Year	Annual
II Year	Semester
III Year	Semester
IV Year	Semester

9. Participation of the department in the courses offered by other departments

Sl No.	Courses name	Offered to (Dept.)
1	Engineering Mechanics	CSE, EEE, ECE, IT
2	Engineering Graphics	CSE, EEE, ECE, IT
3	Material Testing Lab	ME
4	Civil Workshop	CSE, EEE, ECE, IT

10. Number of teaching posts sanctioned, filled and actual (Professors/Associate Professors/Asst. Professors/others)

	Sanctioned	Filled
Professors	2	2
Associate Professors	2	2
Assistant Professors	12	12

11. Faculty profile with name, qualification, designation, area of specialization, experience**(D.Sc./ D.Litt. /Ph.D. / M. Phil. etc.,)**

Sl No.	Name	Qualification	Designation	Specialization	Years of experience
1	S Rathish	M.Tech M.S	Head of Department	1. Structural Engg. 2. Sanitary Engineering	34
2	Anandavally M K	M.Tech	Professor	Structures	33
3	Dr..Anitha Jacob	Ph.D.	Asso. Professor	Traffic and Transportation Planning	12
4	M.G.Cyriac	M.Tech	Asso. Professor	Environmental Engineering	32
5	Tricy Luis	M.Tech	Asst Professor	Geotechnical Engineering	8
6	Carol Varghese	M.Tech	Asst Professor	Traffic and Transportation Planning	3
7	Jisha Akkara	M.Tech	Asst Professor	Traffic and Transportation Planning	3
8	Anju M. J	M.Tech	Asst Professor	Geotechnical Engineering	2
9	Neeraja PG	M.Tech	Asst Professor	Construction Engg.& Management	2
10	Manju Manohar M	M.Tech	Asst Professor	Traffic and Transportation Planning	1
11	Sinu C G	M.Tech	Asst Professor	Structural & Construction management	2
12	Nisni M. Ashraf	M.Tech	Asst Professor	Computer Aided Structural Engg.	3
13	Nikhila.A.P	M.Tech	Asst Professor	Structural Engg	3
14	Anu Theresa K R	M.Tech	Asst Professor	Environmental Engg.	-
15	Sooraj Krishnan	M.Tech	Asst Professor	Water resources & hydro infomatics	-
16	Rachana R	M.Tech	Asst Professor	Hydrology & Water Resource Engg.	4

12. List of senior Visiting Fellows, adjunct faculty, Emeritus Professors: Nil**13. Percentage of classes taken by temporary faculty – programme-wise information: Nil**

14. Programme-wise Student Teacher Ratio

STR is calculated as $= (x + y + z)/N1$

where, x = Number of students in 2nd year of the programme

y = Number of students in 3rd year of the programme

z = Number of students in 4th year of the programme

N1 = Total number of faculty members in the programme (by considering fractional load)

Year	X	Y	Z	X+Y+Z	N1	STR
CAY (2011-2012)	-					-
CAY (2012-2013)						
CAY (2013-2014)	66	62	-	128	11	11.6
CAY (2014-2015)	69	66	62	197	14	14

15. Number of academic support staff (technical) and administrative staff: sanctioned, filled and actual

Year	Technical staff			Administrative Staff		
	Sanctioned	Filled	Actual	-	-	-
2011-2012	NA	3	3	-	-	--
2012-2013	NA	3	3	-	-	-
2013-2014	NA	4	4	-	-	--
2014-2015	NA	4	4	-	-	-

16. Research thrust areas as recognized by major funding agencies

Traffic Engineering – Road Safety – Kerala State Council for Science, Technology and Environment, Trivandrum (Proposal Under process)

17. Number of faculty with ongoing projects from a) national b) international funding agencies and c) Total grants received. Give the names of the funding agencies, project title and grants received project-wise.

Nil

18. Inter-institutional collaborative projects and associated grants received a) National collaboration b) International collaboration

Nil

19. Departmental projects funded by DST-FIST; UGC-SAP/CAS, DPE; DBT, ICSSR, AICTE, etc.; total grants received.

Nil

20. Research facility / centre with

State recognition Nil

National recognition Nil

International recognition Nil

21. Special research laboratories sponsored by / created by industry or corporate bodies

Nil

22. Publications:

* Number of papers published in peer reviewed journals (national / international) - 7

* Monographs - Nil

* Chapters in Books - Nil

* Edited Books - 1

* Books with ISBN with details of publishers -

* Number listed in International Database (For e.g. Web of Science, Scopus, Humanities International Complete, Dare Database - International Social Sciences Directory, EBSCO host, etc.)

* Citation Index – range / average

* SNIP

* SJR

* Impact Factor – range / average

* h-index

Publications

Sl. No.	Name of The Faculty	No. of papers published	Details of papers published	International Journal (IJ) , International Conference (IC), National Conference (NC)
1	Dr. K. K. Babu	24	<p>Babu K. K., (1996). “Soil stabilisation using deteriorated cement”, Proceedings of the Eighth Kerala Science Congress, Kochi. pp515-516</p> <p>Babu K. K. (1996). “Performance of quarry waste as fine aggregate in concrete”, Proceedings of the International Seminar on Civil Engineering Practices in the Twenty-first Century, Roorkee.pp 926-934</p> <p>Babu K. K., Radhakrishnan R. and E.K. K. Nambiar. (1997). “Alternative Fine Aggregate for mortar-An Experimental Study”, Journal of New Building materials and Construction World, January , pp11-13</p> <p>Babu K.K (1997) “Reproportioning of deteriorated Cement concrete mixes” Proceeding of ninth Kerala Science Congress, Thiruvananthapuram.pp 427-429.</p> <p>Babu K. K. Radhakrishnan R. and E.K. K. Nambiar(1997). “Compressive Strength of Brick Masonry with Alternative-Aggregate-Mortar”, Journal of Civil Engineering and Construction Review, September pp 25-29</p> <p>Beena K.S. and Babu K. K. (2003). “Studies on the Performance of Coir Geotextiles in Subgrade Soil”, Proceedings of the Golden Jubilee Conference on Coir Geotextiles, Coir Board,</p>	<p>(NC)</p> <p>(IC)</p> <p>(NJ)</p> <p>(NC)</p> <p>(NJ)</p> <p>(NC)</p> <p>(NC)</p>

			Kochi. Babu K. K and Raji A.K. (2005). “Failure of Concrete structures: Need for quality assessment of fine aggregates” Proceedings of the 21 st national convention of Civil Engineers, Kochi. pp 121 – 122.	(IC)
			Raji A.K and Babu K. K. (2006). “Utilisation of Lime sludge for subgrade stabilization”, Proceedings of the International Inter disciplinary conference on sustainable Technologies for environmental protection, Coimbatore Institute of Technology, Coimbatore	(NC)
			Beena K.S.,Jayasree P.K and Babu K.K.(2006). “Geo- Environmental studies on Coir Pith mixed soil with special reference to saline intrusion”, Proceedings of the Indian Geotechnical conference, Chennai. pp-49-82	(NC)
			Beena K.S. and Babu K.K. (2008). “Testing Coir Geotextile drains for soft ground improvement”, Journal /Proceedings of the Institution of Civil Engineers(London), Ground Improvement, 160(G II) pp- 43-49	(NJ)
			Babu K. K, Beena K and Raji A.K. (2008). “Load – deformation behavior of coir Geotextile reinforced unpaved roads. ”, Journal of Indian Highways- July pp-33-39	(NJ)
			Babu K. K., Beena K.S.andRaji A.K. (2008). “Design of Coir Geotextile reinforced roads using IRC method”, Highway Research Journal.pp-113-118.	(NC)
				(IC)

			Raji A.K and Babu K. K. (2008). “Utilisation of certain industrial wastes for subgrade improvement”, Proceedings of the 3 rd CUSAT National Conference on Recent advances in Civil Engineering, Kochi. pp- 267- 268,	(NC)
			Babu K. K, Raji A.K. and Sreekala G. (2008). “Utilisation of Steel slag as an ingredient in bituminous mixes for road construction”, Proceedings of the international conference on emerging trends in engineering, Prava Rural Engineering college, Pune.	(IC)
			Raji A.K, Babu K.K and Sreekala G(2009). “Use of certain industrial wastes in flexible pavement construction” Proceedings of the 21 st Kerala Science Congress, Kollam pp-276-278.	(NC)
			Raji A.K, Sudha V and Babu K.K(2010). “Building demolition wastes in bituminous mixes – a sustainable technique for road construction”, Proceedings of the International conference on Emerging trends in energy and environment , Sri Sairam Engineering College, Chennai pp-377-385	(NC)
			Raji A.K., Babu K.K and Sudha V (2010). “Study of Strength characteristics of fly ash mixed beach soil”, Proceedings of the 22 nd Kerala Science Congress, Kerala Forest Institute Peechi. pp-431-432.	(NJ)
			Raji A.K, sudha V and Babu K.K. (2010). “Building Demolition waste – an alternate material for Road construction”, Proceedings	(IC)

			<p>of the national Seminar on advances in construction engineering practice. Annamalai University , Annamalai Nagar, pp 1 – 8</p> <p>Raji A.K., Babu K.K and Sudha V (2011). “Study on rut behavior of unpaved roads stabilised using industrial wastes”, Proceedings of the 23rd Kerala Science Congress, Thiruvananthapuram pp-431-432.</p> <p>Babu K. K., Beena K.S. and Raji A.K. (2011). “Estimation of CBR of coir Geotextile reinforced subgrade”, Highway research Journal, July – December pp-41-47</p> <p>Raji A.K, sudha V and Babu K.K. (2011). “subgrade stabilization through application of limesludge”, Proceedings of the International Seminar on reducing carbon footprint in road construction. Indian Road Congress, New Delhi pp-5-67 – 5-71</p> <p>Babu K. K, Raji A.K and Sudha V. (2011). “Use of Alternate materials for aggregates in bituminous road construction- a technique for reducing carbon footprint”, Proceedings of the International Seminar on Reducing carbon footprint on road construction. Indian Road congress, New Delhi pp-5-81 – 5-88</p> <p>Sudha V, Raji A.K. and Babu K.K (2012). “CBR Prediction model for subgrade soils using compaction and index properties”, Proceedings of 24th Kerala Science Congress, Kottayam. pp 426 – 431.</p>	(IC)
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			Raji A.K, Sudha V and Babu K.K. (2013). “Ambient Air quality monitoring and modeling – a study of Palakkad town”, Proceedings of 25 th Kerala Science Congress pp -456-457.	
2	Prof. Rathish S	2	<ol style="list-style-type: none"> 1. Success of community based Rural water supply scheme 2. Water Quality Management 3. Smart water supply for cities. 	<ol style="list-style-type: none"> 1. IC 2. NC 3. NC
3	Prof. M.G.Cyriac	5	<ol style="list-style-type: none"> 1. “Domestic Water Pollution, Manifestation and Mitigation” 2. “Modeling phenol pollution in the Karuvannur river of Kerala, A scientific approach for crisis management” 3. Social and scientific factors to supplement water testing objectives” 4. “Domestic water pollution” 5. JalaVitjanam 	<ol style="list-style-type: none"> 1. NC 2. NJ 3. NJ 4. NJ 5. Book

1	Dr. Anitha Jacob	7	<ol style="list-style-type: none"> 1. Jacob George, Anitha Jacob and Anjaneyulu MV L R, "Modeling highway accidents using ANN", Proceedings of the International Conference on Advances In Materials And Techniques For Infrastructure Development 2011 (AMTID 2011), 22-24th June, 2011, NIT Calicut. 2. Dhanya T V, Anitha Jacob and Anjaneyulu M V L R, "Accident Prediction Models for Rural Roads in Thrissur", Proceedings of the International Conference on Advances in Materials, Mechanics and Management 2010 (IMMM-2010)14-16th January, 2010, College of Engineering and Technology, TVM. 3. Anitha Jacob, Salma Fathima Saleem and Anjaneyulu MV L R, "Evaluation of Geometric Design Consistency for Two-Lane Rural Highways using Operating Speed", Proceedings of the International Conference on Transportation Researchers Group of India (CTRG-2011), 7-10 December, 2011, Bangalore. 4. Anitha Jacob, Dhanya R and Anjaneyulu MV L R" Geometric design consistency of multiple horizontal curves on two-lane rural highways", 	<ol style="list-style-type: none"> 1. IC 2. IC 3. IC 4. IC 5. NC
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			<p>Proceeding of the International Conference on Transportation Researchers Group of India (CTRG-2013), 12-15 December, 2013, Agra.</p>	6. IJ
			<p>5. Procedia - Social and Behavioral Sciences 104 (2013) 1068-1077 (Elsevier publication)</p>	7. IJ
			<p>6. Anitha Jacob and Anjaneyulu MV L R, "Road traffic crash prediction using fuzzy logic", Colloquium on Transportation System Engineering and Management CTSEM2014, 12-13 May, 2014, National Institute of Technology, Calicut.</p>	8. IJ
			<p>7. Anitha Jacob and Anjaneyulu M V L R, "Operating Speed of Different Classes of Vehicles at Horizontal Curves on Two-Lane Rural Highways" – Journal of Transportation Engineering, Vol. 139 (3) , March 2013, 287-294.</p>	
			<p>8. Anitha Jacob and Anjaneyulu M V L R, "Development of Crash Prediction Models For Two-lane Rural Highways Using Regression Analysis" – Highway Research Journal, Indian Roads Congress, Vol 6 No. 1, Jan-June 2013.</p>	

3	Tricy Luis	2	1. Parametric Studies of Soil-Nail Pullout Resistance Using Finite Element Analysis 2. Finite Element Analysis for the Pullout Resistance of soil Nail With varying Parameters	1.NC 2.NC
4	Sinu C G	1	1. Design Of Open Isogrid Using Buckling analysis 2. Design Of Open Isogrid Using Buckling analysis	1.NC 2. IJ
5	Nikhila A P	1	Mathematical Modeling of Strength Characteristics of Concrete by Regression Analysis	IC

23. Details of patents and income generated Nil

24. Areas of consultancy and income generated

Material Testing Lab, Rs.5286/-

25. Faculty selected nationally / internationally to visit other laboratories / institutions / industries in India and abroad

1. Prof. S Rathish was invited by Director Institute of management in Government for conducting classes for all India training of IAS officers.
2. Prof. S Rathish presented paper on “Rational approach to Water quality management” and participated in the national conference organized by Kerala state planning board.
3. Prof. S Rathish is invited as a resource person for training of senior officials and technocrats in various departments like Kerala Water Authority and Kerala Rural water supply and sanitation agency.
4. Dr. Anitha Jacob was invited as the resource person for 3 day workshop conducted by Civil Engineering Department of Govt. Engineering College, Calicut on “Advanced Surveying using Total Station”

26. Faculty serving in a) National committees b) International committees c) Editorial Boards d) any other (please specify)

- i) LMISTE-2
- ii) MIRC – 1
- iii) MIWWA-2
- iv) FIE-1

- v) MIE-4
- vi) Member Calicut University board for syllabus committee- 1
- vii) Chairman (Former)- MTech. Environmental Engineering, Calicut University -1
- viii) Judging committee member – The best Water friendly institution/Household – Malayala manorama – 1
- ix) Veettuvishesam – Dooradharsan program on water quality issues in Kerala -1
- x) Tender committee – Zoological Park in Thrissur
- xi) Architect and Engineers Association – 1
- xii) International Union for Public Health -1
- xiii) Thrissur Management Association -1
- xiv) Indian Water works Association - 2
- xv) Working group members – Handbook on water and sanitation - Clean Water, Safe Water – UNICEF - 2

27. Faculty recharging strategies (UGC, ASC, Refresher / orientation programs, workshops, training programs and similar programs).

The following are the details of FDP/Seminar/Conferences attended by the faculty

FDP/Seminar/Conferences	Any other contributory institute /industry	Developed /Organized by	Durati on	Attended by
Recent Innovations in Transportation Engineering (FDP)	FSDP	GEC,Thrissur	5days	Dr.Anitha Jacob Ms. Jisha Akkara
Data analysis in research using statistical software (FDP)	-	GEC, Thrissur	5days	Dr.Anitha Jacob
Environmental problems & their impact on human health (FDP)	-	GEC, Thrissur	5days	Dr.Anitha Jacob Ms. Sinu C G
Advanced surveying using total station (FDP)	-	GEC, Thrissur	3days	Dr.Anitha Jacob
Transportation systems Engg. & management (Conference)	-	NIT, Calicut	2days	Dr.Anitha Jacob
Ambuja concrete mix design workshop	-	Ambuja cement	2 days	Ms.Sinu.C.G Ms.Jisha Akkara

Cost effectiveness in bulding costruction	-	GEC, Thrissur	5days	Ms.Sinu.C.G
Sustainable construction methods & materials	-	Kerala state nirmithi Kendra, Thrissur	1 day	Ms.Carol Vargheese Ms.Jisha Akkara
Urban transportation systems planning	-	NIT, Calicut	5days	Ms. Manju Manohar
Green buildings materials & technologies	-	Kerala sahithya academy hall	2days	Ms.Tricy luis

Guest Lectures

Guest lectures are arranged to plug the gap between Institute and Industry. This may transform and also help the staff to gather additional knowledge.

- i) Rathish S, Chief Engineer KWA
- ii) Justine Jose, Professor, VAST
- iii) John K.C., Professor and Head, Department of Mechanical Engineering, JECC
- iv) Albine Jose, Senior Technical Engineer, Ambuja Cements
- v) Sree Mahadevan Pillai, Professor, NSS College, Palakkad
- vi) Mr.Shaiju Nair, Manager, Ambuja cement
- vii) Mr. Thomas Joseph, Senior Technical Officer, Leica GeoSystems
- viii) Dr. George K Varghese, Assistant Professor, Department of Civil Engineering, NIT Calicut
- ix) Dr. Anjaneyulu MVL, Professor and Head, Department of Civil Engineering, NIT Calicut

Module Description	Any other contributory institute/ industry	Developed /Organized by	Duration	Resource Person
Association Activity – Water Distribution Scenario		Civil Department	1 Day	Prof. S Rathish
‘Exposure 14’- organized for students – Application of computers in Civil Engineering	-	Civil Department	2 Days	Prof. Justine Jose, VAST

'Exposure 14'- organized for students – Application of CAD software		Civil Department	2 Days	Prof. John K.C, Department of Mechanical Engineering, JECC
'Exposure 14'- organized for students – Current Construction practices and recent construction techniques		Civil Department	2 Days	Albine Jose, Senior Technical Engineer, Ambuja Cements
Recent Developments in Civil Engineering	ISTE	Civil Department	1 Day	Sree Mahadevan Pillai, Professor, NSS College, Palakkad
Role of fine and ultra fine materials in concrete	CEA	Civil Department	1 Day	Mr.Shaiju Nair, Manager, Ambuja cement
Workshop on Total Station	Leica Geosystems	Civil Department	3 Days	Mr. Thomas Joseph, Senior Technical Officer, Leica GeoSystems
Workshop on Total Station	Leica Geosystems	Civil Department	3 Days	Dr. George K Varghese, Assistant Professor, Department of Civil Engineering, NIT
Workshop on Total Station	Leica Geosystems	Civil Department	3 Days	Dr. Anjaneyulu MVLr, Professor and Head, Department of Civil Engineering, NIT Calicut

New facilities Created

1. Wi-Fi connection is enabled with the speed of 10 Mbps covering the whole campus.
2. Volumes of books has been increased to 489 in Department Library
3. Hostel students are facilitated with internet up to 7.30 pm and library up to 7 pm
4. A separate cabin for each faculty has been allotted.

28. Student projects

percentage of students who have done in-house projects including interdepartmental projects
91.94%

ii) Percentage of students placed for projects in organizations outside the institution i.e.in Research laboratories/Industry/other agencies: 8.06%

29. Awards / recognitions received at the national and international level by Faculty

Sl. No.	Name of the Student/ Faculty	Designation	Name of the Award	Awarding Organization
1	Rathish S	Professor	Best Paper Presentation	Indian Water Works Association
2	Dr. Anitha Jacob	Assoc. Professor	Best Research Paper Award in Roads-2013	Indian Roads Congress, instituted by Bihar PWD
3	Anitha Jacob	Assoc. Professor	M.Tech First Rank	NIT Calicut
4	Nikhila A P	Asst. Professor	B.Tech 20 th Rank	Anna University, Chennai
5	Abhishek T S	Student	First Prize National Technical Symposium	Vidya Academy of Science and Technology, Thalakkottukara
6	Hebin J Chiriankandath	Student	First Prize National Technical Symposium	Vidya Academy of Science and Technology, Thalakkottukara
7	Jackson Shajan	Student	First Prize National Technical Symposium	Vidya Academy of Science and Technology, Thalakkottukara
8	Abhishek T S	Student	First Prize National Technical Symposium	Vidya Academy of Science and Technology, Thalakkottukara

30. Seminars/ Conferences/Workshops organized and the source of funding (national / international) with details of outstanding participants, if any.

- v) Workshops- 2
- vi) National - NIL
- vii) International – NIL

Source of funding for each Workshop-Wholly financed by management

31. Code of ethics for research followed by the departments

Civil Engineering touches nearly every aspect of modern life, from water resource studies to transportation and from this to geo-tech and to structural engineering. To carry out research in this field requires inter and intra disciplinary approach which requires a sense of understanding and human values. There is a small apprehension the researchers in this discipline face, and it is a great trepidation on how ethical concerns may be addressed in these situations.

32. Student profile programme/course wise:

Sl. No.	Name of the Course/programme	Applications Received	Selected	Enrolled		Pass percentage
				*M	*F	
1.	B.Tech. (2014 Admission)		63+6 LET	25	44	NA
2.	B.Tech. (2015 Admission)		63	26	37	NA

*M-Male,*F-Female

33. Diversity of students

Sl. No.	Name of Course	% of students from the same state	% of students from other States	% of students from abroad
1.	B.Tech.	100	0	0

34. How many students have cleared Civil Services and Defense Services examinations, NET, SET, GATE and other competitive examinations? Give details category-wise.

Nil. First batch of students are yet to complete the course.

35. Student progression Student progression Percentage against enrolled UG to PG, PG to M.Phil., PG to Ph.D., Ph.D. to Post-Doctoral, Employed Campus selection, Other than campus recruitment, Entrepreneurs

Nil. First batch of students are yet to complete the course.

36. Diversity of staff Percentage of faculty who are graduates of the same university from other universities within the State from universities from other States from universities outside the country

Sl. No.	Name of Course	% of staff from the same university	% of staff from the universities within the state	% of staff from other States	% of staff from abroad
1	B.Tech.	81.25	12.5	6.25	0
2.	M.Tech	37.5	37.5	18.75	6.25

3	Ph.D	-	100	-	-
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337. Number of faculty who were awarded M.Phil., Ph.D., D.Sc. and D.Litt. during the assessment period

M.Tech – 2

Ph.D - 1

38. Present details of departmental infrastructural facilities with regard to a) Library b) Internet facilities for staff and students c) Total number of class rooms d) Class rooms with ICT facility e) Students' laboratories f) Research laboratories

i) Library

The department has a small Departmental Library

Sl. No.	Name of Item	No. of Copies
1	Text Books	358
2	Digital Courseware	4

ii) **Internet facilities for Staff & Students-** Internet facilities are freely available for all staff and students.

iii) **Class rooms with ICT facility:-** Class Rooms

Room Description	Usage	Shared/ Exclusive	Capacity	Rooms Equipped with PC, Internet, book rack, meeting space etc.
Class room ADM 310 (S1&S2)	Class room for I year students	Exclusive	70 sq.mts	Green board, Provision for OHP & LCD, adequate number of fans and tube lights, benches, faculty table and chair
Class room WAB 404 (S3&S4)	Class room for II year	Exclusive	81.6 sq.mts	Green board, Provision for OHP & LCD projectors, adequate number of fans and tube lights,

	students			benches, faculty table and chair
Class room WAB 405 (S5&S6)	Class room for III year students	Exclusive	81.6 sq.mts	Green board, LCD projector ,adequate number of fans and tube lights, benches, faculty table and chair
Class room WAB 406 (S7&S8)	Class room for IV year students	Exclusive	81.6 sq.mts	Black board, LCD projector, adequate number of fans and tube lights, benches, faculty table and chair
Tutorial Room WAB 403	Tutorial	Exclusive	81.6 sq.mts	Chairs, Black board, adequate number of fans and tube lights
Seminar hall WAB 412	Seminar	Exclusive	136 sq.mts	Provision for OHP, LCD projector, CPU, adequate number of fans and tube lights, Black board, 66 chairs
Department library WAB 407	Library	Exclusive	60 sq.mts	Desk and benches accommodating 15 students, adequate number of fans and tubelights, technical books, project reports, general knowledge books.
Drawing Hall WAB 410	Drawing	Shared	137 sq.mts	70 numbers of drawing boards, Black board , Provision for LCD, adequate number of fans and tubelights

Details of Laboratories:

Survey Lab
Concrete Lab

Strength of Material Lab
 Geotechnical Lab
 Environmental Engineering Lab
 Computer Applications Lab
 Civil Workshop

Name of the Lab	Exclusive use/ Shared	Space, Number of Students
Survey Lab	Exclusive	90.45sq.m, 35 Nos
Concrete Lab	Exclusive	210.06Sq.m, 35 Nos
Strength of Material Lab	Exclusive	210.06Sq.m, 35 Nos
Geotechnical Lab	Exclusive	164.41 Sq.m, 35 Nos
Environmental Engineering Lab	Exclusive	151.65Sq.m,35 Nos
Computer Applications Lab	Exclusive	35 Nos
Civil Workshop	Exclusive	35 Nos

39. List of doctoral, post-doctoral students and Research Associates a) from the host institution/university b) from other institutions/universities

a. No doctoral, post doctoral students and research associates in the institution

b. Doctoral students – 1

Ms. Manju Manohar - IIT, Chennai

40. Number of post graduate students getting financial assistance from the university.

No Post Graduate Programmes

41. Was any need assessment exercise undertaken before the development of new programme(s)? If so, highlight the methodology.

No new programs started in the department.

42. Does the department obtain feedback from a. faculty on curriculum as well as teaching-learning-evaluation? If yes, how does the department utilize the feedback?

b. students on staff, curriculum and teaching-learning-evaluation and how does the department utilize the feedback?

c. alumni and employers on the programmes offered and how does the department utilize the feedback?

- a. faculty feedback is evaluated through departmental meetings and are put for discussion in the college council meetings. The feedback is utilized for making decisions from the management or college authority.
- b. student feedback on faculty is taken twice and the evaluation report is given to each faculty. Any suggestions for improvement provided by the students are to be considered by the faculty and modifications or explanations can be provided by the faculty
- c. No alumni and employers so far as first batch not yet completed the course.

43. List the distinguished alumni of the department (maximum 10) : First batch not yet completed the course.

44. Give details of student enrichment programmes (special lectures / workshops / seminar) involving external experts.

Module Description	Developed /Organized by	Duration	Resource Person
Association Activity – Water Distribution Scenario	Civil Department	1 Day	Mr. S Rathish, Chief Engineer, KWA
‘Exposure 14’- organized for students – Application of computers in Civil Engineering	Civil Department	2 Days	Prof. Justine Jose, VAST
‘Exposure 14’- organized for students – Application of CAD software	Civil Department	2 Days	Prof. John K.C, Department of Mechanical
‘Exposure 14’- organized for students – Current Construction practices and recent construction techniques	Civil Department	2 Days	Albine Jose, Senior Technical Engineer, Ambuja Cements
Recent Developments in Civil Engineering	Civil Department	1 Day	Sree Mahadevan Pillai, Professor, NSS College, Palakkad
Role of fine and ultra fine materials in concrete	Civil Department	1 Day	Mr.Shaiju Nair, Manager, Ambuja

Workshop on Total Station	Civil Department	3 Day	Mr. Thomas Joseph, Senior Technical Officer, Leica GeoSystems
Workshop on Total Station	Civil Department	3 Day	Dr. George K Varghese, Assistant Professor, Department of Civil Engineering, NIT
Workshop on Total Station	Civil Department	3 Day	Dr. Anjaneyulu MVLRL, Professor and Head, Department of Civil Engineering, NIT Calicut

45. List the teaching methods adopted by the faculty for different programmes.

- i) PPT/LCD Projector
- ii) Site Visits
- iii) Invited Lectures
- iv) Internet facility
- v) Weekly Tutorial
- vi) Project Work
- vii) Assignments

46. How does the department ensure that programme objectives are constantly met and learning outcomes are monitored?

- Monitoring of students academic performance through model exams, assignments, seminars and viva
- Involvement of students in professional bodies
- Feedback from students through class committee meetings
- Individual student feed back

47. Highlight the participation of students and faculty in extension activities.

1. NSS programme as Volunteers
2. Blood donors Forum
3. Natura Environment Forum

48. Give details of “beyond syllabus scholarly activities” of the department.

A Central library, digital library and department library with excellent collection of reference books, text books are available. The central library remains open after the normal working hours so that students can do extra reading. The students can also refer to advanced text books suggested by the teacher, apart from the prescribed text and reference books listed in the syllabus.

The institution conducts Techfest "Tharang" every year where the students can get an environment for self learning through paper presentation, project presentation. They also develop their leadership qualities and learn to work as part of team.

A computer centre with internet facility remains open after working hours in the evening. The day scholars and hostel students can make use of this facility. A number of e-journals are available in the digital library for the students.

Department organizes a two day training program known as "Exposure" which is a Computer Aided Training on Practical Applications in Civil Engineering in which students are given opportunities to do surveys outside campus and plot and analyse it using computer softwares.

49. State whether the programme/ department is accredited/ graded by other agencies? If yes, give details. No

50. Briefly highlight the contributions of the department in generating new knowledge, basic or applied.

Department has organized several training programs for students, faculty and professionals.

- Awareness programmes on Total Station Survey for academicians and practicing engineers
- Establishment of a multifaceted environmental engineering lab for testing the water quality and for providing solutions to quality related issues of drinking water of the locality.

51. Detail five major Strengths, Weaknesses, Opportunities and Challenges (SWOC) of the department.

STRENGTH

- Availability of number of experienced and wise senior faculty members.
- Availability of number of dynamic, cooperating and qualified young faculty
- State of the art facilities and labs.
- Capable of doing consultancy services to society.
- Ability to engage in multitasking

WEAKNESS

- Research activity taking place in the department is low.

- Unable to provide more number of elective courses.
- Lack of autonomy in opting a syllabus that equip the students for competitive job market.
- Coping with the fast changing advancement in the field is a challenge.
- Lack of industry academy partnership

OPPORTUNITIES

- To start M.Tech. program which is in need with the industry.
- To double the student intake
- Campus placement from core companies
- Entrepreneurship development

CONSTRAINTS

- Quality of Students intake.
- Time constraints for the faculty due to remoteness of the institution
- Inability to plan various programs for students because of lack of prefixed exam schedule of the university

52. Future plans of the department.

1. To start water related consultancy programs
2. To start M. Tech. course in Civil Engineering
3. To raise funds to enhance research activities.
4. To have a periodic community development program to train the unemployed youngsters and also to educate the people in better energy utilization.



DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

1. Name of the department : **COMPUTER SCIENCE AND ENGINEERING**

2. Year of Establishment : **2002**

3. Is the department part of a School/Faculty of the University ? : **No**

4. Names of Programmes / Courses offered

UG :B.Tech (Computer Science and Engineering)

PG :M.Tech (Computer Science and Engineering).

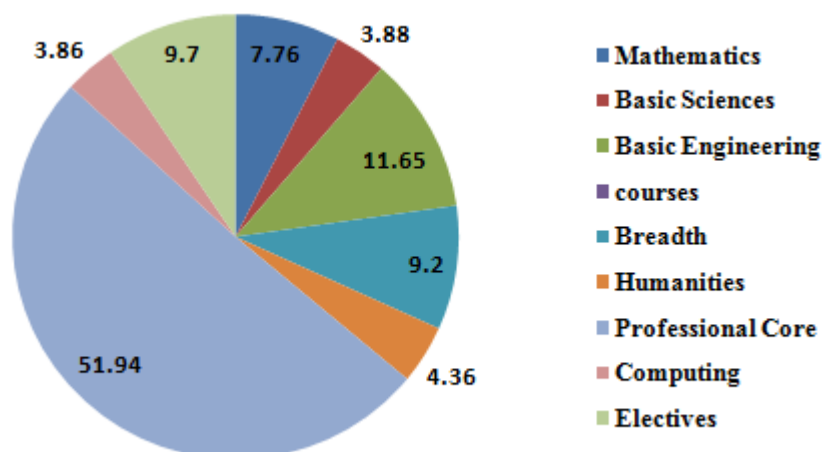
Courses Offered

Sl . No.	Courses Offered	Intake	When Started	Specialization
1	B.Tech	120	2000	Computer Science & Engineering
2	M.Tech	18	2013	Computer Science & Engineering

5. Interdisciplinary Programmes and the departments involved

Courses in CSE Department	Department Involved
Engineering Mathematics I	Basic Science Humanities
Discrete Computational Structures	
Engineering Physics & Lab.	
Engineering Chemistry & Lab	
Humanities and Communication	
Engineering Mechanics & Mechanical Workshops	Mechanical Engineering
Engineering Graphics	
Basics of Civil and Mechanical	Civil and Mechanical Engineering
Basics of Electrical and Electronics & Communication Engg.	Electronics & Communication Engineering
Electronic Circuits	
Signal Processing	
Digital Systems Lab	
Electrical & Civil Workshops	Civil Engineering

Course Components Credits In Percentage



6. Courses in Collaboration with other Universities, Industries, Foreign Institutions etc

Sl.No.	Name of Industry/Organization	Activities Through the MoU
1.	Cosmic Micro Power Solutions Pvt.Ltd Bangalore	Firm ware & Software support

7. Details of programmes discontinued, if any, with reasons: Nil

8. Examination System: Annual/Semester/Trimester/Choice Based Credit System : Semester

B. Tech programme		M. Tech programme	
I Year	Annual	I Year	Semester
II Year	Semester	II Year	Semester
III Year	Semester		
IV Year	Semester		

9. Participation of the department in the courses offered by other departments

Sl No.	Courses name	Offered to (Dept.)
1	C Programming	MECH
2	C Programming	CIVIL
3	C Programming	ECE
4	C Programming	EEE
5	Data & Communication Network	ECE

10. Number of teaching posts sanctioned, filled and actual (Professors/Associate Professors/Asst. Professors/others)

Designation of Post	Sanctioned(UG/PG)					Filled(UG/PG)				
	2014-2015	2013-2014	2012-2013	2011-2012	2010-2011	2014-2015	2013-2014	2012-2013	2011-2012	2010-2011
Professor	2	2	1	1	1	1	1	1	1	1
Associate Professor	4	3	3	3	3	0	0	0	0	0
Assistant Professor	14	11	19	10	10	24	13	10	9	8

9. Faculty profile with name, qualification, designation, specialization, (D.Sc./D.Litt./ Ph.D. / M. Phil. etc.,)

Sl. No	Name of the Faculty	Designation	Area of specialization	Total years of experience	Qualification
1	Prof. Muralee Krishnan C	Professor	Data Analytics	18	M.E (1993) M.B.A (1996)
2.	Prof. Rajappan Pillai. M.T	Professor	Signal Processing	31	M.Tech
3	Ms. Aswathy Wilson	Assistant Professor	Computer Science and Engineering	13	M.E (2007)
4	Mr. Thomas George	Assistant Professor	Computer Science and Engineering	11	M.E (2004)
5	Ms. Jyothis T S	Assistant Professor	Computer Science and Engineering	10	M.E (2011) MBA (2005)
6	Mr. Viju Shankar	Assistant Professor	Image processing	8	M.Tech (2011)
7	Ms. Seenia Francis	Assistant Professor	Computer and communication	10	M.E (2011)
8	Mr. Anil Antony	Assistant Professor	Computer and communication	7	M.E (2007)
9	Ms. Namitha T N	Assistant Professor	Computer Science and Engineering	7	M.E (2013)
10	Ms. Swapna B Sasi	Assistant Professor	Computer Science and Engineering	11	M.E (2009)

11	Ms. Kumary R Soumya	Assistant Professor	Image processing	6	M.Tech (2009)
12	Ms. Rigi C R	Assistant Professor	Computer Science and Engineering	8	M.E(2010) MBA(2011)
13	Mr. Shaiju Paul	Assistant Professor	Computer networking	5	M.E (2010)
14	Ms. Fousiya K K	Assistant Professor	Computer Science and Engineering	4	M.Tech (2012)
15	Ms.Divya M Menon	Assistant Professor	Image processing	9	MTech(2009)
16	Mr. Bineesh M	Assistant Professor	Computer networks	8	M.E (2011)
17	Mr.Aneesh Chandran	Assistant Professor	Computer networks	7	M.E (2011)
18	Ms. Shoba Xavier	Assistant Professor	Computer networks	6	M.E (2013)
19	Mr. Majo John	Assistant Professor	Image processing	4	M.Tech (2010)
20	Mr. Unnikrishnan P	Assistant Professor	Image Processing	Study leave	M.Tech (2010)
21	Ms. Diana Davis	Assistant Professor	Image processing	3	M.Tech (2010)
22	Ms. Sabna A B	Assistant Professor	Image processing	4	M.Tech (2011)
23	Ms. Jisna V A	Assistant Professor	Image processing	2	M.Tech (2012)
24	Mr. John Paul Martin	Assistant Professor	Information System	6 months	M.Tech (2014)
25	Ms. Reshma K V	Assistant Professor	Information System	1	M.Tech (2014)
26	Ms. Ninu Francis	Assistant Professor	Computer Science & Engineering	1	M.Tech (2013)
27	Mr. Dany Varghese	Assistant Professor	Computer Science & Engineering	1	M.Tech (2015)

12. List of senior Visiting Fellows, adjunct faculty, Emeritus Professors: Nil

13. Percentage of classes taken by temporary faculty – programme-wise information: Nil

14. Programme-wise Student Teacher Ratio

STR is calculated as $= (x + y + z)/N1$

where, x = Number of students in 2nd year of the programme

y = Number of students in 3rd year of the programme

z = Number of students in 4th year of the programme

N1 = Total number of faculty members in the programme (by considering fractional load)

Year	x	y	z	x + y + z	N1	STR
2012-2013	53	62	56	171	12	14.25
2013-2014	61	52	60	173	12	14.42
2014-2015	97	61	52	210	14	15

15. Number of academic support staff (technical) and administrative staff: sanctioned, filled and actual

Designation of Post	Sanctioned(UG/PG)					Filled(UG/PG)				
	2014-2015	2013-2014	2012-2013	2011-2012	2010-2011	2014-2015	2013-2014	2012-2013	2011-2012	2010-2011
Academic support Staff (Technical)	6	6	6	6	6	6	6	5	6	6
Administrative Staff	1	1	1	1	1	1	1	1	1	1

16. Research thrust areas as recognized by major funding agencies : NIL

17. Number of faculty with ongoing projects from a) national b) international funding agencies and c) Total grants received. Give the names of the funding agencies, project title and grants received project-wise. : NIL

18. Inter-institutional collaborative projects and associated grants received

a) National collaboration b) International collaboration : NIL

19. Departmental projects funded by DST-FIST; UGC-SAP/CAS, DPE; DBT, ICSSR, AICTE, etc.; total grants received. : NIL

20. Research facility / centre with**State recognition :** Nil**National recognition :** Nil**International recognition :** Nil**21. Special research laboratories sponsored by / created by industry or corporate bodies :NIL****22. Publications:***** Number of papers published in peer reviewed journals (national / international)****Faculty Research Publication details of the year 2012-2013**

Sl no.	Name	Paper Title	Journal	Issue/ Volume
1	Viju Shankar	"A Randomized Algorithm for Adaptive Switching Median Filter for Impulse Noise Removal"	International Journal for Graphics & Image Processing, IJGIP	Vol 3/Issue 1/Feb 2013
2	Namitha T N	"A Randomized Algorithm for Adaptive Switching Median Filter for Impulse Noise Removal"	International Journal for Graphics & Image Processing, IJGIP	Vol 3/Issue 1/Feb 2013

Faculty Research Publication details of the year 2013-2014

Sl No.	Name	Paper	Journal	Issue/ Volume
1	Ms. Aswathy Wilson	Data Mining Technique for Heart Disease Prediction	WARSE- International Journal of Advances in Computer Science and Technology	Volume 3, No.2, February 2014
		Heart Disease Prediction Using the Data mining Techniques	International Journal of Computer Science Trends and Technology (IJCST)	Volume 2 Issue 1, Jan-Feb 2014
		Peer to peer reliable resource sharing in wireless mesh networks	IJCST – International journal of computer science trends and technology	Vol2., Issue1 , Feb 2014
		Data mining on social security and social welfare data	International Journal of Science & Engineering Research	Volume 5, Issue 2,February

2	Mr.Thomas George	Decision support system for CRM in online shopping system	WARSE- International Journal of Advances in Computer Science and Technology	Volume 3, No.2, February 2014
		Peer to peer reliable resource sharing in wireless mesh networks	IJCST – International journal of computer science trends technology	Vol2., Issue1 , Feb 2014
3	. Ms. Jyothis T S	Motion Recognition – A Review	BEST:IJMITE - International Journal of Management, IT & Engineering	Volume 2, Issue 2, February 2014
		A review on remote Android assistance	IJIRD – International journal of innovative research & development	Vol 3, Issue 2 Feb 2014
		Defensive security mechanisms for cloud computing security risks – A review	IJSR	Vol 3, Issue 2 Feb 2014
		A study on remote home monitoring using different technologies	WARSE- International Journal of Advances in Computer Science and Technology	Volume 3, No.2, February 2014
		Remote Android assistance with GPS Tracking	IOSR-JCE	Vol16, Issue2, Mar 2014
4	Mr. Viju Shankar	A refined image super resolution technique using neighbor embedding	Paper presented – Malabar – Eximinius	03/14
		A refined image super resolution technique using neighbor embedding	Springer	Volume 1, Issue 1, February 2014
5	Ms. Seenia Francis	Proxy Based Content Centric Networking with Packet Loss Avoidance in Adhoc Network	IJCAT – International Journal of Computing and Technology	Volume 1, Issue 1, February 2014
		Phishing Website detection : A review	IJCSMC-International journal of computer science and mobile computing	Volume 3, Issue 2, February 2014
		Peer to peer reliable resource sharing in wireless mesh networks	IJCST – International journal of computer science trends and technology	Vol2., Issue1 , Feb 2014
		Direction Selective Dissemination Scheme in Mobile Cloud	IJCAT – International Journal of Computing and Technology	Volume 1, Issue 1, February 2014

6	Mr. Anil Antony	Energy efficient shortest path routing in WSN using two point crossover & external mutation	IJETAE - International Journal of Emerging Technology & Advanced Engineering	Volume 4, Issue 2, February 2014
		Smartphone based wearable sensors for cyborgs using neural network engine	IJES – International journal of Engineering and science	Vol 3 , Issue 2, Mar 2014
		A review on BB84 protocol in quantum cryptography	IJES – International journal of Engineering and science	Vol 3 , Issue 2, Mar 2014
7	Ms. Namitha	A review on image dehazing methods	IJCSMC – International journal of computer science and mobile computing	Volume 3, Issue 2, February 2014
8	Ms. Swapna B Sasi,	Location Based Encryption using Message Authentication Code in Mobile Networks	IJCAT – International Journal of Computing and Technology	Volume 1, Issue 1, February 2014
		Network virtualization in open flow networks –A review	IJSCR -International journal of scientific and engineering research	Vol 5 , issue 2 , Feb 2014
		Energy efficient shortest path routing in WSN using two point crossover & external mutation	IJETAE - International Journal of Emerging Technology & Advanced Engineering	Volume 4, Issue 2, February 2014
9	Ms. Kumary R Soumya	Semantic web based representation of VGI	IJES – International Journal of Engineering & Science	Volume 3, Issue 2, February 2014
		License Plate Detection and Character Recognition using Contour Analysis	WARSE- International Journal of Advances in Computer Science and Technology	Volume 3, No.2, February 2014
		A review on subspace method for face image recognition	IJETAE- International journal of emerging Technology and Advanced engineering	Volume 4, Issue 2, February 2014
		Security Enhancement in interactive CAPTCHA	IOSR – Journal of computer engineering	Vol .16 issue2 ver 1
		Text Extraction From Images : A survey	WARSE- International Journal of Advances in Computer Science and Technology	Volume 3, No.2, February 2014
		Securing Websites through multi-CAPTCHA	IJCAT – International Journal of Computing and Technology	Volume 1, Issue 2, March 2014

		A survey on Different CAPTCHA Techniques	WARSE- International Journal of Advances in Computer Science and Technology	Volume 3, No.2, February 2014
10	Ms. Rigi C R	Energy efficient shortest path routing in WSN using two point crossover & external mutation	IJETAE - International Journal of Emerging Technology & Advanced Engineering	Volume 4, Issue 2, February 2014
		Shortest path routing algorithm in wireless sensor networks	IJSRE -International journal of scientific Research and Education	volume 2, Issue 3, March 2014
		Genetic algorithm for energy efficient shortest path routing in wireless sensor networks	IJSRCSAMS- International Journal of Scientific research in Computer Science Applications and Management Studies	volume 3, Issue 2, March 2014
		Wireless mesh networks : Issues and challenges	IJCSMC – International journal of computer science and mobile computing	Volume 3, Issue 2, February 2014
11	Mr. Shaiju Paul	Android Based Home Automation Using Raspberry Pi	IJCAT – International Journal of Computing and Technology	Volume 1, Issue 1, February 2014
		Privacy in map reduce based systems : A review	IJCSMC – International journal of computer science and mobile computing	Volume 3, Issue 2, February 2014
		Addressing big data with Hadoop	IJCSMC – International journal of computer science and mobile computing	Volume 3, Issue 2, February 2014
12	Ms. Fousiya K K	Cloud Mobile Social TV for Adaptive Video Streaming	WARSE- International Journal of Advances in Computer Science and Technology	Volume 3, No.2, February 2014
		A review on subspace method for face image recognition	IJETAE- International journal of emerging Technology and Advanced engineering	Volume 4, Issue 2, February 2014

Faculty Research Publication details of the year 2014-2015

Sl No.	Name	Paper	Journal	Issue/ Volume
1	Ms. Aswathy Wilson	Retrieval of images using data mining techniques	International Conference on Contemporary Computing and Informatics (IC3I)	IEEE Explorer 2014
		Security Using Armstrong Number And Authentication Using Colour	International Journal Of Advanced Research In Data mining And Cloud Computing	ISSN 2321-8754 Online ISSN 2321-8924
2	Mr. Thomas George	Performance Enhancement of WEKA :The data mining tool	IJESR-International Journal of Engineering &science RESEARCH	Volume 3, Issue 2, February 2015.
		Mobitrack:A Comparative Study On Android Mobile Tracking	International Journal of Advanced Research in Information and Communication Engineering	Volume 3, Issue 2, February 2015.
3	Ms. Jyothis T S	Video Annotation-A Review	IEEE-International Conference on intelligent systems and control	IEEE Jan 2015
		Security For SMARTGRID Communications	IJESR-International Journal of Engineering &science RESEARCH	Volume 5 issue 1January 2015
		Datapacket Filtering Mechanism For Networks	International Journal of Advanced Research in Information and Communication Engineering	Volume 3, Issue 2, February 2015.
		Comparative Study On Packet Filtering Mechanisms	International Journal of Advanced Research in Information and Communication Engineer	Volume 3, Issue 2, February 2015.
4	Mr. Viju Shankar	Cognitive Computing Simulator-Compass	International Conference on Contemporary Computing and	IEEE Jan 2015

			Informatics (IC3I)	
5	Ms. Seenia Francis	Driving direction with GPS	IJESR-International Journal of Engineering & science RESEARCH	volume 4 issue 12 december 2014
		An Acknowledgement Based Intrusion Detection system in MANET	ICE-Tech	IEEE Explorer
6	Mr. Anil Antony	Updated Bus Time table in Mobile Phone Independent of Any Bus Companies	IJESR-International Journal of Engineering & science Research	volume 4 issue 12 december 2014
		A Step Towards Better Home Automation Using Different Wireless Technologies	International Journal of Advanced Research in Information and Communication Engineering	Volume 3, Issue 2, February 2015.
		Arduino Shield Based Energy Efficient- Globally Controllable Home Automation System	International Journal Of Advanced Research In Computer Science And Applications	Volume 3, Issue 2, February 2015.
7	Ms. Namitha T N	Security Display System	IJESR International Journal of Engineering and Science Research	volume 4 issue 12 December 2014
		Single Image Rain Streaks Removal and De-noising Using Self Learning technique	IEEE International conference On Electrical, Electronics, Communication and Optimization (EESCO)-2015	Jan-15
8	Ms. Swapna B Sasi	Short Range Communication Using En/Decryption Mechanism	International Journal Of Advanced Research In Information And Communication Engineering	
		Certificate Revocation in MANET using Clustering	IEEE 9th International Conference on Intelligent Systems	Jan-15

		Comparison of various Encryption Techniques	International journal IJCSSE	
9	Ms. Kumary R Soumya	Vision Based Rail Inspection Systems	IJESR-International Journal of Engineering Science & Research	Volume 5 issue 1 January 2015
		Feed-Forward Neural Network Processing Speed Analysis and an Experimental Evaluation of Neural Network Frameworks	IEEE 9th International Conference on Intelligent Systems	Jan-15
		Image Tampering Detection :A review	IEEE 9th International Conference on Intelligent Systems and Control	Jan-15
		Smartphone in health care : A novel method for measuring pulse and SpO2	International Journal of Graphics & Image Processing	Vol 5 issue 1
10	Ms. Riji C R	Game Theoretic Approach For Network Security	IJESR-International Journal of Engineering & science RESEARCH	Volume 5 issue 1 January 2015
		A Comparative study of Topology Enabled & Hiding Multipath Routing Protocol in MANETs	IEEE International conference On Electrical, Electronics, Communication and Optimization(EESCO)	IEEE Jan-15
		Secure Schemes for M2M communication	IJESR-International Journal of Engineering & science RESEARCH	Volume 5 issue 1 January 2015
11	Mr. Shaiju Paul	An Analysis Through the Available Data Mining Procedures With Big Data	IJESR-International Journal of Engineering & science RESEARCH	volume 4 issue 12 December 2014
		Comparative Study on Internet Radio using Raspberry Pi	Journal of Environmental Science, Computer Science and Engineering & Technology	March 2015- May 2015; Sec. C Vol.4.No.2

		An International Peer Review E-3 Journal of Sciences and Technology	Journal of Environmental Science, Computer Science and Engineering & Technology	JECET; March 2015-May 2015; Sec. B Vol.4.No.2,135-139.
12	Ms. Fousiya K K	Datapacket Filtering Mechanism For Networks	International Journal of Advanced Research in Information and Communication Engineering	Volume 3, Issue 2, February 2015.
		A Method For Automatic Caption Generation Of Images	International Journal Of Advanced Research In Datamining And Cloud Computing	Volume 3, Issue 2, February 2015.
		Automatic Caption Generation Of Images : A Review	International Journal Of Advanced Research In Computer Science and Applications	Volume 3, Issue 2, February 2015.
13	Ms.Divya M Menon	Performance Analysis of Security Protocol for Advanced Metering Infrastructure in Smart Grid	IJITI-International Journal of Information Technology Infrastructure	Volume 3 issue 6 December 2014
14	Mr .Bineesh M	Lab Tracer - The Remote Desktop Technology	International Journal of Computer Sciences and Engineering	ISSN-2347-2693 OCT 14
15	Mr.Aneesh Chandran	CLEARMiner-Mining of multitemporal Remote Sensing Images	IJCATR-International Journal of Computer Applications Technology And Research	Volume 4 issue 1 January 2015
16	Ms.Diana Davis	“ZigBee Technology For Data Communication- A Comparative Study With Other Wireless Technologies”	International Journal of Advanced Research in Computer Science [IJARCS]	Volume 5, No. 7, PP 261-265, September-October 2014

		“Color Code –The Replacement for Bar Code”	International Journal of Computer Sciences and Engineering [IJCSE]	Volume-2, Issue-10 E-31st Oct 2014.
		, "Data Security Through Armstrong Number and Colors"	International Journal of Computer Sciences and Engineering	Volume-02, Issue-12, Page No (25-28), Dec -2014
		"Secure Banking System Using Multi – Factor Authentication",	International Journal of Computer Sciences and Engineering	Volume-02, Issue-12, Page No (34-37), Dec -2014
17	Ms. Sabna A B	Secure Sharing Of personal Health Records in Cloud Computing Using Encryption	IJCATR-International Journal of Computer Applications Technology And Research	Volume 4 issue 1 January 2015
18	Ms. Jisna	A new Proposal for QKD Relay Networks	International Journal of Advanced Research in Computer and Communication Engineering	Feb-15
		Graphical Password Authentication Using Clued Click Points	International Journal of Computer Sciences and Engineering	Dec-15

* **Monographs** : NIL

* **Chapters in Books** : NIL

* **Edited Books** :NIL

* **Books with ISBN with details of publishers** : NIL

* **Number listed in International Database (For e.g. Web of Science, Scopus, Humanities International Complete, Dare Database - International Social Sciences Directory, EBSCO host, etc.)**

* **Citation Index – range / average** : NIL

* **SNIP** ; NIL

* **SJR** : NIL

* **Impact Factor – range / average** : NIL

* **h-index** : NIL

23. Details of patents and income generated : NIL

24. Areas of consultancy and income generated : NIL

25. Faculty selected nationally / internationally to visit other laboratories / institutions / industries in India and abroad : NIL

26. Faculty serving in a) National committees b) International committees c) Editorial Boards d) any other (please specify) : NIL

27. Faculty recharging strategies (UGC, ASC, Refresher / orientation programs, workshops, training programs and similar programs).

The following are the details of FDP/Seminar/Conferences attended by the faculty

Academic Year-2011-12

Sl. No.	Name of Faculty	FDP Details	Venue	Duration	Resource Person/ Participant
1	Dr. Gylson Thomas	Two day national work shop on Computational Intelligence.	JECC	2 days	Participant
		INTERNATIONAL SEMINAR on ADVANCES IN SMART GRID TECHNOLOGY	JECC	2 days	Participant
2	Prof. Muralee Krishnan C	Two day national work shop on Computational Intelligence.	JECC	2 days	Participant
		INTERNATIONAL SEMINAR on ADVANCES IN SMART GRID TECHNOLOGY	JECC	2 days	Participant
		Engineering trends in science and current affairs	JECC	2 days	Participant
3	Ms. Aswathy Wilson	Two day national work shop on Computational Intelligence.	JECC	2 days	Participant
		Faculty Enablement Program	Sahrd aya	1 Week	Participant

		INTERNATIONAL SEMINAR on ADVANCES IN SMART GRID TECHNOLOGY	JECC	2 days	Participant
4	Mr. Thomas George	Two day national work shop on Computational Intelligence.	JECC	2 days	Participant
		INTERNATIONAL SEMINAR on ADVANCES IN SMART GRID TECHNOLOGY	JECC	2 days	Participant
5	Ms. Jyothis T S	Two day national work shop on Computational Intelligence.	JECC	2 days	Participant
		J2EE Workshop	SCMS	1 Week	Participant
		INTERNATIONAL SEMINAR on ADVANCES IN SMART GRID TECHNOLOGY	JECC	2 days	Participant
		Scripting for Engineering and Scientific applications	GEC, PKD	1 Week	Participant
6	Mr. Viju Shankar	Two day national work shop on Computational Intelligence.	JECC	2 days	Participant
		INTERNATIONAL SEMINAR on ADVANCES IN SMART GRID TECHNOLOGY	JECC	2 days	Participant
		FDP on VLSI	JECC	3 days	Participant
		Cities and climate changes	CSTR D, TCR	1 day	Participant
7	Ms. Seenia Francis	Two day national work shop on Computational Intelligence.	JECC	2 days	Participant
		INTERNATIONAL SEMINAR on ADVANCES IN SMART GRID TECHNOLOGY	JECC	2 days	Participant
8	Mr. Anil Antony	Two day national work shop on Computational Intelligence.	JECC	2 days	Participant
		INTERNATIONAL SEMINAR on ADVANCES IN SMART GRID TECHNOLOGY	JECC	2 days	Participant

		Mission 10X by Wipro	Sahru daya	1 Week	Participant
		Emerging Trends in Power electronics	JECC	3 Days	Participant
9	Ms. Namitha T N	Two day national work shop on Computational Intelligence.	JECC	2 days	Participant
		INTERNATIONAL SEMINAR on ADVANCES IN SMART GRID TECHNOLOGY	JECC	2 days	Participant
10	Ms. Aswathi Viswanathan	Two day national work shop on Computational Intelligence.	JECC	2 days	Participant
		INTERNATIONAL SEMINAR on ADVANCES IN SMART GRID TECHNOLOGY	JECC	2 days	Participant
11	Ms. Swapna B Sasi	Two day national work shop on Computational Intelligence.	JECC	2 days	Participant
		INTERNATIONAL SEMINAR on ADVANCES IN SMART GRID TECHNOLOGY	JECC	2 days	Participant
12	Ms. Kumary R Soumya	Two day national work shop on Computational Intelligence.	JECC	2 days	Participant
		INTERNATIONAL SEMINAR on ADVANCES IN SMART GRID TECHNOLOGY	JECC	2 days	Participant
13	Mr. Deepak Krishnankutty	Two day national work shop on Computational Intelligence.	JECC	2 days	Participant
		INTERNATIONAL SEMINAR on ADVANCES IN SMART GRID TECHNOLOGY	JECC	2 days	Participant
14	Mr. Shaiju Paul	Two day national work shop on Computational Intelligence.	JECC	2 days	Participant
		INTERNATIONAL SEMINAR on ADVANCES IN SMART GRID TECHNOLOGY	JECC	2 days	Participant

Academic Year-2012-13

Sl. No.	Name of Faculty	FDP Details	Venue	Duration	Resource Person/ Participant
1	Dr. Gylson Thomas	TWO DAY FDP ON TOC	JECC	2 Days 4/4/13 - 5/4/13	Participant
2	Prof. Muralee Krishnan C	TWO DAY FDP ON TOC	JECC	2 Days 4/4/13 - 5/4/13	Participant
3	Ms. Aswathy Wilson	TWO DAY FDP ON TOC	JECC	2 Days 4/4/13 - 5/4/13	Participant
4	Mr. Thomas George	TWO DAY FDP ON TOC	JECC	2 Days 4/4/13 - 5/4/13	Participant
5	Ms. Sreeja Rajesh	FDP on Machine Learning Techniques	SCMS	2 Weeks 20/05/13- 01/06/13	Participant
6	Ms. Jyothis T S	TWO DAY FDP ON TOC	JECC	2 Days 4/4/13 - 5/4/13	Participant
7	Mr. Viju Shankar	TWO DAY FDP ON TOC	JECC	2 Days 4/4/13 - 5/4/13	Participant
8	Ms. Seenia Francis	TWO DAY FDP ON TOC	JECC	2 Days 4/4/13 - 5/4/13	Participant
		Design Testing and Launching of Satelite systemes	JECC	3 Days 06/02/2013- 08/02/2013	Participant
9	Mr. Anil Antony	TWO DAY FDP ON TOC	JECC	2 Days 4/4/13 - 5/4/13	Participant
10	Namitha T N	TWO DAY FDP ON TOC	JECC	2 Days 4/4/13 - 5/4/13	Participant

		Design Testing and Launching of Satellite systmes	JECC	3 Days 06/02/2013-08/02/2013	Participant
11	Ms. Swapna B Sasi	“Summer School on Network & Information Security”	IITM-K, TVM	2 Weeks 20/05/2013-31/05/2013	Participant
		Two day FDP on TOC	JECC	2 Days 4/4/13 - 5/4/13	Participant
12	Ms. Kumary R Soumya	Two day FDP on TOC	JECC	2 Days 4/4/13 - 5/4/13	Participant
13	Mr. Shaiju Paul	Two day FDP on TOC	JECC	2 Days 4/4/13 - 5/4/13	Participant
		Infosys Campus Connect	Infosys, TVM	1 Week 25/06/12-29/06/12	Participant
14	Ms. Fousiya K K	Two day FDP on TOC	JECC	2 Days 4/4/13 - 5/4/13	Participant

Academic Year-2013-14

Sl. No.	Name of Faculty	FDP Details	Venue	Duration	Resource Person/ Participant
1	Dr. Gylson Thomas	FDP	CSR, Pariyaaram	2 Days 05/07/2013 - 06/07/2013	Participant
2	Prof. Muralee Krishnan C	FDP	CSR, Pariyaaram	2 Days 05/07/2013 - 06/07/2013	Participant
3	Ms. Aswathy Wilson	FDP	CSR, Pariyaaram	2 Days 05/07/2013 - 06/07/2013	Participant
		Work shop on Cloud Computing	IITM-K, TVM	2 Days 15/03/2013 - 16/03/2013	Participant

4	Mr. Thomas George	FDP	CSR, Pariyaaram	2 Days 05/07/2013 - 06/07/2013	Participant
5	Ms. Jyothis T S	FDP	CSR, Pariyaaram	2 Days 05/07/2013 - 06/07/2013	Participant
6	Mr. Viju Shankar	FDP	CSR, Pariyaaram	2 Days 05/07/2013 - 06/07/2013	Participant
7	Ms. Seenia Francis	Network Simulation using NS2	GEC Thrissur	2 days 26/10/2013-27/10/2013	Participant
		FDP	CSR, Pariyaaram	2 Days 05/07/2013 - 06/07/2013	Participant
8	Mr. Anil Antony	Image Processing & Pattern Recognition	GEC Thrissur	1 day	Participant
		FDP	CSR, Pariyaaram	2 Days 05/07/2013 - 06/07/2013	Participant
		Network Administration	GEC Thrissur	1 Week 19/11/2013-23/11/2013	Participant
9	Ms. Namitha T N	FDP	CSR, Pariyaaram	2 Days 05/07/2013 - 06/07/2013	Participant
10	Ms. Swapna B Sasi	FDP	JEC	1 Days	Participant
		Training Programme on Cyber Security	RIT, Kottayam	1 Week 25/03/14-29/03/14	Participant
11	Ms. Kumary R Soumya	FDP	JEC	1Days	Participant
12	Ms. Riji C R	Network Simulation using NS2	GEC Thrissur	2 days 26/10/2013-27/10/2013	Participant
		FDP	CSR, Pariyaaram	2 Days 05/07/2013 - 06/07/2013	Participant

13	Mr. Shaiju Paul	Network Administration	GEC Thrissur	1 Week 19/11/2013- 23/11/2013	Participant
		Work shop on Cloud Computing	IITM-K, TVM	2 Days 15/03/14- 16/03/14	Participant
		FDP	CSR, Pariyaaram	2 Days 05/07/2013 - 06/07/2013	Participant
14	Ms. Fousia K K	FDP	CSR, Pariyaaram	2 Days 05/07/2013 - 06/07/2013	Participant

Academic Year-2014-15

Sl. No.	Name of Faculty	FDP Details	Venue	Duration	Resource Person/ Participant
1	Prof. Muralee Krishnan C	ICT Accademy Train the Trainers Life Skills	JECC	3 Days (15/12/14- 17/12/14)	Participant
2	Ms. Aswathy Wilson	ICT Accademy Train the Trainers Life Skills	JECC	3 Days (15/12/14- 17/12/14)	Participant
3	Mr. Thomas George	ICT Accademy Train the Trainers Life Skills	JECC	3 Days (15/12/14- 17/12/14)	Participant
		Intellectual Property Rights and Research Funding Possibilities	JECC	2 Days 16,17/01 2015	Participant
4	Ms. Jyothis T S	ICT Accademy Train the Trainers Life Skills	JECC	3 Days (15/12/14- 17/12/14)	Participant
		Intellectual Property Rights and Research Funding Possibilities	JECC	2 Days 16,17/01 2015	Participant
5	Mr. Viju Shankar	STTP on Advanced Algorithm Analaysis and Desin	GEC , TCR	5 Days (21/04/15 - 25/4/15)	Participant
6	Ms. Seenia Francis	Intellectual Property Rights and Research Funding Possibilities	JECC	2 Days 16,17/01 2015	Participant
7	Mr. Anil Antony	ICT Accademy Train the Trainers Life Skills	JECC	3 Days (15/12/14- 17/12/14)	Participant
		Intellectual Property Rights and Research Funding Possibilities	JECC	2 Days 16,17/01 2015	Participant
8	Ms. Namitha T N	Concept Coaching (12/11/14 – 14/11/14)	JECC	3 Days (12/11/14- 14/11/14)	Participant

		ICT Accademy Train the Trainers Life Skills	JECC	3 Days (15/12/14-17/12/14)	Participant
9	Ms. Swapna B Sasi	Concept Coaching (12/11/14 – 14/11/14)	JECC	3 Days (12/11/14-14/11/14)	Participant
		Intellectual Property Rights and Research Funding Possibilities	JECC	2 Days 16,17/01 2015	Participant
10	Ms. Kumary R Soumya	Concept Coaching (12/11/14 – 14/11/14)	JECC	3 Days (12/11/14-14/11/14)	Participant
		Intellectual Property Rights and Research Funding Possibilities	JECC	2 Days 16,17/01 2015	Participant
11	Ms. Rigi C R	ICT Accademy Train the Trainers Life Skills	JECC	3 Days (15/12/14-17/12/14)	Participant
12	Mr. Shaiju Paul	ICT Accademy Train the Trainers Life Skills	JECC	3 Days (15/12/14-17/12/14)	Participant
		Intellectual Property Rights and Research Funding Possibilities	JECC	2 Days 16,17/01 2015	Participant
13	Ms. Fousiya K K	Concept Coaching (12/11/14 – 14/11/14)	JECC	3 Days (12/11/14-14/11/14)	Participant
		ICT Accademy Train the Trainers Life Skills	JECC	3 Days (15/12/14-17/12/14)	Participant
		STTP on Advanced Algorithm Analiysis and Desin	GEC , TCR	5 Days (21/04/15 - 25/4/15)	Participant
		Intellectual Property Rights and Research Funding Possibilities	JECC	2 Days 16,17/01 2015	Participant
14	Ms.Divya M Menon	Intellectual Property Rights and Research Funding Possibilities	JECC	2 Days 16,17/01 2015	Participant
		Recent Trends in Cloud Computing	Rajagiri	1 Day 05/12/2014	Participant
15	Mr Bineesh M	Advanced Operating Systems(29-6-14 To 4-7-14)	NIT,Calicut	7 Days (29/06/14-04/07/2014)	Participant
		Intellectual Property Rights and Research Funding Possibilities	JECC	2 Days 16,17/01 2015	Participant
16	Mr.Aneesh Chandran	Concept Coaching (12/11/14 – 14/11/14)	JECC	3 Days (12/11/14-14/11/14)	Participant

		Intellectual Property Rights and Research Funding Possibilities	JECC	2 Days 16,17/01 2015	Participant
17	Ms.shoba Xavier	Concept Coaching (12/11/14 – 14/11/14)	JECC	3 Days (12/11/14- 14/11/14)	Participant
		Recent Trends in Cloud Computing	Rajagiri	1 Day 05/12/2014	Participant
		Intellectual Property Rights and Research Funding Possibilities	JECC	2 Days	Participant
18	Mr.Majo John	Intellectual Property Rights and Research Funding Possibilities	JECC	2 Days	Participant
19	Ms.Diana Davis	ICT Accademy Train the Trainers Life Skills	JECC	3 Days (15/12/14- 17/12/14)	Participant
		Intellectual Property Rights and Research Funding Possibilities	JECC	2 Days 16,17/01 2015	Participant
20	Ms. Sabna A B	Recent Trends in Cloud Computing	Rajagiri	1 Day 05/12/2014	Participant
		Intellectual Property Rights and Research Funding Possibilities	JECC	2 Days 16,17/01 2015	Participant
21	Ms. Jisna V A	ICT Accademy Train the Trainers Life Skills	JECC	3 Days (15/12/14- 17/12/14)	Participant
		Intellectual Property Rights and Research Funding Possibilities	JECC	2 Days 16,17/01 2015	Participant

Academic Year-2015-16

Sl. No.	Name of Faculty	FDP Details	Venue	Duration	Resource Person/ Participant
1	Prof. Muralee Krishnan C	Empowering through Team Work	JECC	7 Days 01/06/2015 - 07/06/2015	Participant
2	Prof. M T Rajappan Pillai	Empowering through Team Work	JECC	7 Days 01/06/2015 - 07/06/2015	Participant
		National workshop on Python	JECC	2 Days 31/07/2015 - 01/08/2015	Participant

3	Ms. Aswathy Wilson	Empowering through Team Work	JECC	7 Days 01/06/2015 - 07/06/2015	Participant
		National workshop on Python	JECC	2 Days 31/07/2015 - 01/08/2015	Participant
4	Mr. Thomas George	Empowering through Team Work	JECC	7 Days 01/06/2015 - 07/06/2015	Participant
		National workshop on Python	JECC	2 Days 31/07/2015 - 01/08/2015	Participant
5	Ms. Jyothis T S	Empowering through Team Work	JECC	7 Days 01/06/2015 - 07/06/2015	Participant
		National workshop on Python	JECC	2 Days 31/07/2015 - 01/08/2015	Participant
6	Mr. Viju Shankar	Empowering through Team Work	JECC	7 Days 01/06/2015 - 07/06/2015	Participant
		National workshop on Python	JECC	2 Days 31/07/2015 - 01/08/2015	Participant
7	Ms. Seenia Francis	Empowering through Team Work	JECC	7 Days 01/06/2015 - 07/06/2015	Participant
		National workshop on Python	JECC	2 Days 31/07/2015 - 01/08/2015	Participant
8	Mr. Anil Antony	Empowering through Team Work	JECC	7 Days 01/06/2015 - 07/06/2015	Participant
		National workshop on Python	JECC	2 Days 31/07/2015 - 01/08/2015	Participant
9	Ms. Namitha T N	Empowering through Team Work	JECC	7 Days 01/06/2015 - 07/06/2015	Participant
		National workshop on Python	JECC	2 Days 31/07/2015 - 01/08/2015	Participant

10	Ms. Swapna B Sasi	Empowering through Team Work	JECC	7 Days 01/06/2015 - 07/06/2015	Participant
		National workshop on Python	JECC	2 Days 31/07/2015 - 01/08/2015	Participant
11	Ms. Kumary R Soumya	Empowering through Team Work	JECC	7 Days 01/06/2015 - 07/06/2015	Participant
		National workshop on Python	JECC	2 Days 31/07/2015 - 01/08/2015	Participant
12	Ms. Rigi C R	Empowering through Team Work	JECC	7 Days 01/06/2015 - 07/06/2015	Participant
		National workshop on Python	JECC	2 Days 31/07/2015 - 01/08/2015	Participant
13	Mr. Shaiju Paul	Empowering through Team Work	JECC	7 Days 01/06/2015 - 07/06/2015	Participant
		National workshop on Python	JECC	2 Days 31/07/2015 - 01/08/2015	Participant
14	Ms. Fousiya K K	Empowering through Team Work	JECC	7 Days 01/06/2015 - 07/06/2015	Participant
		National workshop on Python	JECC	2 Days 31/07/2015 - 01/08/2015	Participant
15	Ms. Divya M Menon	Empowering through Team Work	JECC	7 Days 01/06/2015 - 07/06/2015	Participant
		National workshop on Python	JECC	2 Days 31/07/2015 - 01/08/2015	Participant
16	Mr Bineesh M	Empowering through Team Work	JECC	7 Days 01/06/2015 - 07/06/2015	Participant
		Sustainable Engineering	CET , TVM	3 Days 18/06/15 - 20/06/2015	Participant

		National workshop on Python	JECC	2 Days 31/07/2015 - 01/08/2015	Participant
17	Mr.Aneesh Chandran	Empowering through Team Work	JECC	7 Days 01/06/2015 - 07/06/2015	Participant
		National workshop on Python	JECC	2 Days 31/07/2015 - 01/08/2015	Participant
18	Ms.shoba Xavier	Empowering through Team Work	JECC	7 Days 01/06/2015 - 07/06/2015	Participant
		National workshop on Python	JECC	2 Days 31/07/2015 - 01/08/2015	Participant
19	Mr.Majo John	Empowering through Team Work	JECC	7 Days 01/06/2015 - 07/06/2015	Participant
		National workshop on Python	JECC	2 Days 31/07/2015 - 01/08/2015	Participant
20	Ms.Diana Davis	Empowering through Team Work	JECC	7 Days 01/06/2015 - 07/06/2015	Participant
		National workshop on Python	JECC	2 Days 31/07/2015 - 01/08/2015	Participant
21	Ms. Jisna V A	Empowering through Team Work	JECC	7 Days 01/06/2015 - 07/06/2015	Participant
		National workshop on Python	JECC	2 Days 31/07/2015 - 01/08/2015	Participant

Guest Lectures

Guest lectures are arranged to plug the gap between Institute and Industry. This may transform and also help the staff to gather additional knowledge.

Expert talk -

Academic year 2012-2013

Sl. No.	Date	Topic	Resource Person	Beneficiaries
1	6/7/2012	Free and Open source Software	Mr. Hiran Venugopal, CEO, Ubiquiro	S3, S5 & S7 Students
2	7/2/2013	.NET Framework	Trainers from NIIT, Thrissur	S6 & S8 CSE Students
3	12/2/2013	Linux and its Relevance	Trainers from IPSR Solutions Ltd, Kottayam	S6 & S8 CSE Students

Academic year 2013-2014

Sl. No.	Date	Topic	Resource Person	Beneficiaries
1	24/7/2013	Entrepreneurship	Mr. Sijo Kuruvilla, CEO, Start-up Village	S3, S5 & S7 CSE Students
2	17/02/2014	Expectation from fresh engineers	Mr. Harikrishnan, Engineer, VISUAL IQ	S3, S5 & S7 CSE Students

Academic year 2014-2015

Expert talk in academic year 2014-2015

Sl. No.	Date	Topic	Resource Person	Beneficiaries
1	21/7/2014	Java Fundamentals	Mr. Anil Kumar R V, Think Force, Ernakulum	S5 CSE Students
2	24/7/2014	Start up Companies	Mr. Pranav Kumar Suresh, CEO, Start up Village, Kochi	S3, S5 & S7 CSE Students

3. Workshops and seminars Conducted

Sl. No.	Date	Topic	Resource Person	Beneficiaries
1	29/8/2013	Ethical Hacking	Mr. Hitesh Chowdhary, Trainer, Tech Defence, Ahmedabad	S3, S5 & S7 CSE Students
2	23/9/2014	Android Hacking	Mr. Mahesh Rakejha, Trainer, Tech Defence, Ahmedabad	S3, S5 & S7 CSE Students

New facilities Created

5. Wi-Fi connection is enabled with the speed of 10 Mbps covering the whole campus.
6. Volumes of books has been increased to 489 in Department Library
7. Hostel students are facilitated with internet up to 7.30 pm and library up to 7 pm
8. A separate staff room for faculty has been allocated in connection with the start of PG programme.

28. Student projects

Best projects

Academic Year	Project Title	Area	Done by
2013-2014	Region filling using image in painting	Image processing	Swarthy K S, Kishan K Suresh, Anju Arjunan, Minu Jose T
	Fuzzy keyword search over encrypted data in cloud computing	Networking	Fancy Augustine, Jennifer James, Milana V Alappat, FeonJaison, Nima K Johnson
	WIFI intrusion detector	Network security	Varun Das M, Aswini Chacko, , Ashly Sunny, Jackson U P, Chitra T
2012-2013	SPEAK BI	Natural Language Processing	Neenu Ann Francis, Neenu Joy, Reema Thomas, Reen Jose, Rini Kurian
	Text summarizer	Natural Language Processing	Anjali V, Anjana S, RinuKuriakose, Sandhya R
	RECON 1	Robotics	Abel Joseph Aloor, Donna Treesa Jacob, Malini K Bhaskaran, RahanaChelikkattil, SreebhaSreenivas
2011-2012	PC controlled helicopter	Embedded system	Binoy P B, Lixon Davis M, Neema Merlin Rodrigues, Prabin

			K
	GOM Trade	Data Mining	Asha Maria Aricatt, Harikrishnan T, Kripa John, Vineeth John C
	Load balancing	Networking	Firose Muhammed Kutty T, Manya Menon, Muhammed Shaheen P, VysakhAnto

Average projects

Academic Year	Project Title	Area	Done by
2013-2014	Region filling using image inpainting	Image processing	Swathy K S, Kishan K Suresh, Anju Arjunan, Minu Jose T
	Fuzzy keyword search over encrypted data in cloud computing	Networking	Fancy Augustine, Jennifer James, Milana V Alappat, FeonJaison, Nima K Johnson
	WIFI intrusion detector	Network security	Varun Das M, Aswini Chacko, Ashly Sunny, Jackson U P, Chitra T
2012-2013	SPEAK BI	Natural Language Processing	Neenu Ann Francis, Neenu Joy, Reema Thomas, Reen Jose, Rini Kurian
	Text summarizer	Natural Language Processing	Anjali V, Anjana S, RinuKuriakose, Sandhya R
	RECON 1	Robotics	Abel Joseph Aloor, Donna Treesa Jacob, Malini K Bhaskaran, RahanaChelikkattil, SreebhaSreenivas
2011-2012	PC controlled helicopter	Embedded system	Binoy P B, Lixon Davis M, Neema Merlin Rodrigues, Prabin K
	GOM Trade	Data Mining	Asha Maria Aricatt, Harikrishnan T, Kripa John, Vineeth John C
	Load balancing	Networking	Firose Muhammed Kutty T, Manya

			Menon, Muhammed Shaheen P, VysakhAnto
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Percentage of students who have done in-house projects including inter departmental/program

Academic Year	% of students
2014-2015	100%
2013-2014	100%
2012-2013	100%
2011-2012	100%
2010-2011	100%

Percentage of Students Doing Projects in Collaboration With Other Universities / Industry / Institute : NIL

29) Awards/ Recognitions received by faculty and students

Sl. No	Name of the Student/Faculty	Designation	Name of the Award	Awarding Organization	Year
1	Prof. Muralee Krishnan C	Faculty	Sadhguru award 2014	University of Calicut	2014-2015
2	Ms.Fousiya KK	Faculty	Topper award for M.Tech course	University of Calicut	2013-2014
3	Soorya M	Student	Sadguna award 2014	University of Calicut	2013-2014
4	Akhil A S	Student	First prize in Coding contest	Malabar Engineering college	2013-2014
5	Arun Jose	Student	Second prize in Coding contest	Malabar Engineering college	2013-2014
6	Joel Raju	Student	Second prize in Web designing contest	Malabar Engineering college	2013-2014
7	Tessa Jose	Student	First prize in Best Technievent	Amal Jyothi Engg College	2013-2014
8	Varghese	Student	Second prize in Best Technievent	Amal Jyothi Engg College	2013-2014
4	DanyVarghese	Student	sunny diamond award	Jyothi college	2013-2014
5	Merin Jos, DeepthiPraveenlal, Arun Jose, Antony Varghese	Student	First prize in Online Bonanza	Sahrdaya Tech Fest	2013-2014

6	Cijo Jose, Kiran K. Vincent, JeffinThomas	Student	Second prize in Online Bonanza	Sahrdaya Tech Fest	2013-2014
7	Aswini Chacko	Student	Second prize in Tamil Story Writing and Tamil Versification, Third prize in Tamil essay writing and Tamil elocution in D-Zone	Calicut University	2013-2014
8	Akhil	Student	Seventh place in All Kerala BSNL Quiz.	Kerala BSNL	2013-2014
9	Jeffin Thomas won in.	Student	First prize in NFS Most Wanted	Vimal Jyothi Engineering College, Kannur	2013-2014
10	Cijo Jose, Jeffin Thomas and Sooraj Antony, a	Student	Second prize in Quizzipedia	Vimal Jyothi Engineering College, Kannur.	2013-2014
11	Joe Mathew, Dalwin Davis, Sanjo Simon & Radwin Raphael	Student	First prize	GEC, Thrissur.	2013-2014
12	Anila Baby & Leenat Chacko	Student	First prize in "Waste Wise Model Making Engg. College.	at Jyothi Engg College	2013-2014
13	Akhil A S	Student	First prize in Coding contest	Malabar Engineering college	2013-2014
14	Soorya , Anna Varghese & Sreenath	Student	First prize in coding contest	in MES College of Engg	2013-2014
15	Soorya M	Student	First prize in Essay writing competition	MES College of Engg	2013-2014
16	Niji Devassy	Student	Second prize in Essay writing competition	MES College of Engg	2013-2014
17	Soorya M	Student	First prize in Poster making competition	MES College of Engg	2013-2014
18	Vinaya	Student	first prize in Caption writing competition	MES College of Engg	2013-2014
19	Soorya M	Student	Second prize in Caption writing competition	MES College of Engg	2013-2014
20	Malini K Bhaskaran of	Student	First Rank in B.Tech	University of Calicut	2012-2013
21	RahanaChelikkattil	Student	Third Rank in B.Tech	University of Calicut	2012-2013

Doctoral / post doctoral fellows

Doctoral : 3

1. Prof.Muralee Krishnan.C
2. Swapna.B.Sasi
3. Divya.M. Menon

30. Seminars/ Conferences/Workshops organized and the source of funding (national / international) with details of outstanding participants, if any.

Sl. No.	Year	Name of the seminar /Conference /workshop	Date(s)	Source of Funding
1	2013	Theory of Computation	4th and 5th April 2013.	Management
2	2012	Computational Intelligence	24th & 25th January 2012.	Management
3	2011	National Workshop on Ethical Hacking and Network Security	February 24 & 25, 2011	Management

b) International Workshops/Conferences Conducted : 1

Sl.No.	Year	Name of the seminar /Conference /workshop	Source of Funding
1	2012	Advances in Smart Grid Technology	Management

31. Code of ethics for research followed by the departments

The ethical conduct of research is a cornerstone of modern scientific research. Computer science and the discipline's technological artifacts touch nearly every aspect of modern life, and computer scientists must conduct and report their research in an ethical manner. There is a small selection of potential ethical dilemmas researchers in this discipline face, and it is a great apprehension on how ethical concerns may be addressed in these situations.

32. Student profile programme-wise:

Year	Name of	Applications	Selected	Enrolled	Pass %
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	the Course / program	received	(Number Admitted including Lateral Entry)	Male	Female	
2014-2015	B.Tech (CSE)	340	108	56	52	
2013-2014		250	98	43	55	
2012-2013		200	61	24	37	
2011-2012		150	52	19	33	
2010-2011		220	60	14	46	100
2014-2015	M.Tech (CSE)	50	18	2	16	
2013-2014		40	16	1	15	

33. Diversity of students

Year	Name of the Course / programme	% students from the same State	% of students from other States	% of students from abroad
2014-2015	B.Tech (CSE)	84	0	16
2013-2014		84	0	16
2012-2013		91	0	9
2011-2012		91	0	9
2010-2011		91	0	9
2014-2015	M.Tech (CSE)	99	0	1
2013-2014		100	0	0

34. How many students have cleared Civil Services and Defense Services examinations, NET, SET, GATE and other competitive examinations? Give details category-wise.

Name of the Competitive No. of students qualified examination	No. of students qualified				
	2014-2015	2013-2014	2012-2013	2011-2012	2010-2011
GATE	NO DATA	2	0	10	6
Civil services	NIL	NIL	NIL	NIL	NIL
Defense services	NIL	NIL	NIL	NIL	NIL
NET	NIL	NIL	NIL	NIL	NIL
SLET	NIL	NIL	NIL	NIL	NIL
Public service	NIL	NIL	NIL	NIL	NIL

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progression Percentage against enrolled

UG to PG, PG to M.Phil., PG to Ph.D. ,Ph.D. to Post-Doctoral,

**Employed Campus selection, Other than campus recruitment,
Entrepreneurs**

Student progression		Against % enrolled
UG to PG		6%
PG to Ph.D.		NIL
Employed	Campus selection	45%
	Other than campus recruitment	20%

Item	LYG (2010- 2014)	LYGm1 (2009-2013)	LYGm2 (2008-2012)
No. of admitted students corresponding to LYG including lateral entry (N)	63	56	58
No. of students who obtained jobs as per the record of placement office (x1)	14	1	22
No. of students who found employment otherwise at the end of the final year (x2)	10	20	13
$x = x1 + x2$	24	21	35
No. of students who went for higher studies with valid qualifying scores / ranks (y)	11	13	10
Assessment Point	18.33	19.96	24.57

36. Diversity of staff Percentage of faculty who are graduates of the same university/ from other universities within the State/ from universities from other States/ from universities outside the country :

Sl. No.	Name of Course	% of staff from the same university	% of staff from the universities within the state	% of staff from other States	% of staff from abroad
1	B.Tech.	31	65	4	-
3.	M.Tech	18	19	63	-
3	Ph.D	-	-	-	-

37. Number of faculty who were awarded M.Phil., Ph.D., D.Sc. and D.Litt. during the assessment period : NIL

38. Present details of departmental infrastructural facilities with regard to a) Library b) Internet facilities for staff and students c) Total number of class rooms NAAC for Quality and Excellence in Higher Education 99 Manual for Self-study Universities d) Class rooms with ICT facility e) Students' laboratories f) Research laboratories

Classroom Description

Room description	No. of Rooms	Usage	Shared/ Exclusive	Capacity	Rooms Equipped with PC, Internet, etc.
Class Room	1	1st year class Room	Exclusive	70.2 sq. m	Sufficient number of desks and benches for accommodating 69 students, green board, OHP, Provision for LCD projector. Necessary illumination and air circulation is provided with fluorescent lamps and ceiling fans in the class room.
Class Room	1	1st year class Room	Exclusive	81.9 sq. m	Sufficient number of desks and benches for accommodating 69 students, Green board, OHP, Provision for LCD projector. Necessary illumination and air circulation is provided with fluorescent lamps and ceiling fans in the class room.

Class Room	2	2nd year class Rooms	Exclusive	71.4 sq. m	Sufficient number of desks and benches for accommodating 69 students, green board, OHP, provision for LCD projector. Wi-Fi connection is provided in the department. Necessary illumination and air circulation is provided with fluorescent lamps and ceiling fans in the class room.
Class Room	1	3rd year class Room	Exclusive	81.6 sq. m	Sufficient number of desks and benches for accommodating 69 students, Green board, LCD Projector. For accessing internet Wi-Fi connection is provided in the department. Necessary illumination and air circulation is provided with fluorescent lamps and ceiling fans in the class room.
Class Room	1	4th year class Room	Exclusive	71.4 sq. m	Sufficient number of desks and benches for accommodating 69 students, Green board, Wi-Fi connection is provided in the department. Necessary illumination and air circulation is provided with fluorescent lamps and ceiling fans in the class room. LCD projector is provided for taking lectures and seminars.
Seminar Hall		Classes / seminars	Exclusively for the Department	153 sq. m	Provided 120 chairs for accommodating students, White Board and a LCD projector with a desktop PC.

	1				Necessary illumination and air circulation is provided with enough number of fluorescent lamps and ceiling fans
Department Library	1	Library	Exclusive	61.2 sq. m	Department library have more than 750 volumes of text books, lab manuals, project and seminar reports, lab records which can be accessed by both faculty and students. Enough number of book racks for keeping the same.
Faculty Room I	1	HOD Cabin and Office Room	Exclusive	23.8 sq. m	Equipped with PC with printer, internet facility (LAN connection, Wi-Fi) and intercom connection. For keeping files and documents almirah and steel rack are provided. The room is also equipped with data boards and notice board for displaying faculty and student details.
Faculty Room II	1	Separate Cubicles for individual faculty	Exclusive	95.2 sq. m	Equipped with PC and printer, internet facility (LAN connection, Wi-Fi) and intercom connection. For keeping files and documents almirahs and steel rack are provided. For displaying common notices for staffs a notice board is provided. Sufficient number of chairs and

					office tables for accommodating 10 staff. Extra chairs are provided for counseling students.
Faculty Room III	1	Separate Cubicles for individual faculty and one cabin for counseling purpose	Exclusive	108.2 sq. m	Equipped with PC and printer, internet facility (LAN connection, Wi-Fi) and intercom connection. For keeping files and documents almirahs and steel rack are provided. For displaying common notices for staffs a notice board is provided. Sufficient number of chairs and office tables for accommodating 10 staff. Extra chairs are provided for counseling students.
Faculty Room IV	1	Separate Cubicles for individual faculty	Exclusive	61.2 sq. m	Equipped with PC and printer, internet facility (LAN connection, Wi-Fi) and intercom connection. For keeping files and documents almirahs and steel rack are provided. For displaying common notices for staffs a notice board is provided. Sufficient number of chairs and office tables for accommodating 8 staff. Extra chairs are provided for counseling students.
Faculty Room V		Separate Cubicles for individual faculty	Exclusive	12.4 sq. m	Equipped with internet facility (LAN connection, Wi-Fi) and intercom connection. For keeping files and

	1				documents almirahs and steel racks are provided. Sufficient number of chairs and office tables for accommodating 3staffs.
Tutorial Room I	1	Tutorial work	Exclusive	80.8 sq m	Sufficient number of desks and benches for accommodating one batch of students, Green board. Necessary illumination and air circulation is provided with fluorescent lamps and ceiling fans in the tutorial room.
Tutorial Room II	1	Tutorial work	Exclusive	44.8 sq m	Sufficient number of desks and benches for accommodating one batch of students, Green board. Necessary illumination and air circulation is provided with fluorescent lamps and ceiling fans in the tutorial room.
Discussion/Counseling Room	1	Discussion/Counseling purpose	Shared	30 sq. m	Sufficient numbers of tables and chairs are arranged for Discussion/Counseling.

Lab Details

Laboratory description in the curriculum	Exclusive use / shared	Space, number of students	Number of experiments	Quality of instruments	Laboratory manuals
Programming Lab : Programming Environmental Lab	Exclusive	78.5 sq m, 32	20	Excellent	Available
Programming Paradigm Lab :	Exclusive	78.5 sq m, 32	20	Excellent	Available

Programming Environmental Lab					
Systems Lab: Programming Environmental Lab	Exclusive	78.5 sq m, 32	20	Excellent	Available
Compiler Lab : Programming Environmental Lab	Exclusive	78.5 sq m, 32	18	Excellent	Available
Data Structures Lab:Data Structures Lab	Exclusive	78.5 sq m, 31	19	Excellent	Available
Hardware Lab Section I(MASM Lab):Data Structures Lab	Exclusive	78.5 sq m, 31	15	Excellent	Available
Network Lab:Data Structures Lab	Exclusive	78.5 sq m, 31	11	Excellent	Available
Project Lab,seminar :Advanced Networking Lab	Shared	91.8 sq m, 32	-	Excellent	-
Project Lab :Project Lab	Shared	136 sq m,30	-	Excellent	-
Hardware Lab Section II :Hardware Lab	Exclusive	61.2 sq m,16	9	Excellent	Available
Programming in C: Computer Centre	Shared	237 sq m,79	25	Excellent	Available

Computing Facilities Details

Lab Name	Description of the Equipment (Make of PC)	Configuration	Quantity
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1. Computer Centre			
Server Room 1	Sun	X4150	3Nos
		Tek 2530	1No
		Tek SL24	1No
		X4150	1No
		Tek LT04	1No
Server Room 2	HP	COMPAQDX2480	5Nos
		Elite 7100	2 Nos
	ACER	VERITON	2 Nos
	DELL	OPTIPLEX 390	1 No
		OPTIPLEX 755	1 No
HCL	Infiniti Global Line 2700 HN	1 No	
Computer Centre	DELL	OPTIPLEX 390	29 Nos
	ACER	Power 945 Desktop	10 Nos
Programming Centre	ACER	Power 945 Desktop	40Nos
Multimedia Centre	Lenovo	Think centre M72	10 Nos
	HP	Elite 7100 MT	3 Nos
	ACER	Power 945 Desktop	1No
	HCL	LX infiniti Pro BL1205	1No
Linux Centre	Service centre		
2. Research Lab I	Lenovo	Core i3	20
3. Advanced Networking Lab	HCL	LX infiniti Pro BL1205	32 Nos
4. Programming Environmental Lab	HCL	LX infiniti Pro BL1205	12 Nos
	Lenovo	Think centre M72	20 Nos
5. Data Structures Lab	HP	COMPAQDX2480	31Nos
6. Hardware Lab	8086 microprocessor Trainer Kit Quantity: 6 Nos, Model: M-86-02		
7. Project Lab	DELL	OPTIPLEX 755	30Nos

Class rooms(UG)

Discription	No	Size cms	Area m ² (Carpet Area)
CSE(A)	EAB 103	1360*700	95.2
	EAB 104	1360*700	95.2
	EAB 105	1360*700	95.2

CSE(B)	WAB 305	1020*800	81.6
	WAB 306	1020*800	81.6
	WAB 307	1020*800	81.6

Tutorial (UG)

CSE	WAB 408	630*642	40.4
	WAB 409	630*642	40.4

Tutorial (PG)

Discription	No	Size cms	Area m ² (Carpet Area)
CSE	EAB 401	1360*700	95.2
	EAB 402	1360*700	95.2

SEMINAR HALL

Discription	No	Size cms	Area m ² (Carpet Area)
CSE	EAB 111	1700*900	153

COMPUTER CENTRE

Discription	No	Size cms	Area m ² (Carpet Area)
CSE	ADM 101	2160*800	172.8

LIBRARY

Discription	No	Size cms	Area m ² (Carpet Area)
	ADM 106	2800*1560	436.8
	ADM 210	2275*1560	354.9
Total available area			791.7 m ²
No.of.rooms			2Nos

LABORATORY

CSE	EAB 107	Network Lab	1360*900	122.4 m ²	670.4 m ²
	EAB 108	Hardware Lab	1020*900	91.8 m ²	
	EAB 112	Data structure Lab	875*900	78.5 m ²	
	EAB 113	Programming Lab	875*900	78.5 m ²	
	WAB 303	Multimedia Lab	1700*800	136 m ²	
	ADM 103	Network Lab	1360*600	81.6 m ²	

	ADM 104	Data Base Lab	1360*600	81.6 m ²	
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WORKSHOP

Discription	No	Lab Name	Size cms	Area m ² (Carpet Area)	Available Area
	WS 2	Smithy & Foundary	900*915	82.3	593.9
	WS 3	Foundry	969*915	88.6	
	WS 4	Welding,fitting,Sheet Metal	2725*915		
	WS 5	Carpentry	900*915	82.3	
	WAB 002	Ele.Workshop	1020*900	91.8	

PG LABORATORY

Discription	No	Lab Name	Size cms	Area m ² (Carpet Area)	Available Area
CSE	EAB 110		1020*900	91.8	Available area 302.2
	ADM 102	Research Lab	700*1000	70	
EEE	EAB 407		1320*600	79.2	
	EAB 408		680*900	61.2	

Dept:LIBRARY

Discription	No	Size cms	Area m ² (Carpet Area)
CSE	EAB 109	340*900	30.6

Dept.Office, Cabins of HODS, Staff rooms

<u>Discription</u>	<u>No</u>		<u>Size cms</u>	Available Area m ²
CSE	EAB 101	HOD	340*700	204
	EAB 102	STAFF	1020*700	
	WAB 301	HOD	340*800	
	WAB 302	STAFF	1020*800	

39. List of doctoral, post-doctoral students and Research Associates a) from the host institution/university b) from other institutions/universities : NIL

40. Number of post graduate students getting financial assistance from the university.

Agency	No. of students received financial assistance				
	2014-2015	2013-2014	2012-2013	2011-2012	2010-2011
College	No Data	216	167	133	83
University	NIL	NIL	NIL	NIL	NIL
Government	No Data	285	191	11	16
Other agencies	NIL	NIL	NIL	NIL	NIL

41. Was any need assessment exercise undertaken before the development of new programme (s) ? If so, highlight the methodology. : NIL

42. Does the department obtain feedback from

a. faculty on curriculum as well as teaching-learning-evaluation? If yes, how does the department utilize the feedback? : YES

b. students on staff, curriculum and teaching-learning-evaluation and how does the department utilize the feedback? : YES

c. alumni and employers on the programmes offered and how does the department utilize the feedback? : YES

The students are asked to give unbiased and honest feedback. The process is transparent and does not disclose student identity.

The students evaluate the teachers in the following context:

- Engage lectures regularly on time
- Overall appearance and personal Communication Skills
- Explanation
- Use of supplementary methods
- Overall appearance and personal Communication Skills
- Explanation
- Use of supplementary methods
- Readiness to address student doubts
- Availability
- Use of black board
- Relationship with students

After collecting the online feedback from the students, the evaluation of the teacher is done by Quality Improvement Cell and teachers are evaluated based on the overall performance in the following categories:

Evaluation	Grade	Grade points
Excellent	A	5
Very Good	B	4
Good	C	3
Fair	D	2
Satisfactory	E	1

The complete report of all the Departments reaches Principal and the report of respective department is submitted to their respective Head of Department. The teachers with other grades introspect themselves and improve in the concerned areas.

A class committee meeting is conducted twice during each semester including the Head of Department, 6 students representing the class and the concerned faculties on each subject. The students and the faculties can raise their concern on various issues related academic and general matters.

Verbal feedback is collected from the students during lectures and practical hours and the same is discussed with concerned head and necessary corrective action is initiated. Head of Department discusses the feedback with the concerned faculty for improvement.

The feedback is collected two times, once at mid semester and also at the end of the semester. About 95% of students participate and it is done on-line.

Comments are considered positively. Weaknesses with regard to teaching are expected to be rectified by the faculty with the sole objective of maintaining good academic practices and standards.

Basis of reward/corrective measures, if any

Based on the feedback collected from the students on the faculty and the result analysis, the following reward /corrective measures are taken up in the Institute.

Rewards

Appreciation letter by the HOD for those who produce 100% results in University Examinations.

Corrective measures

- Counselling the faculty who scored less than 3.5 points on 5 – point scale
- Sponsoring for refresher courses to improve the subject knowledge

- Organizing workshops on teaching methodologies
- Arranging specialized lectures by eminent faculty
- Making available e-lectures sourced from internet

43. List the distinguished alumni of the department (maximum 10)

Sl No.	Name	Affiliation
1	Tincy Thomas	DRDO Bangalore
2	Mini .G. Krishnan	Software
3	Mohammed Musthafa	Software
4	Sony .K. Antony	Software
5	Alan Varghese	Software
6	Jilmi Jose	Software
7	Malini.K.Bhaskar	Software
8	Manju Mukundan	Software
9	Soorya .M.	Software
10	Sreenath.N	Software

44. Give details of student enrichment programmes (special lectures / workshops / seminar) involving external experts

SI No	Year	Name of the Academician / Scientist	Designation	Organization	Purpose of Visit
1	2014-2015	Ms. Deena Venugopal	Founder of Anabytes	Anabytes	EDC Inauguration
2	2014-2015	Mr. Rajeev Krish	Founder and Director, WAUM Team	WAUM Team	EDC Inauguration
3	2014-2015	Dr. T.V BABU RAJENDRA N	Senior Professor,	Vidya Academy of Science and Technology, Thrissur	PG Inauguration
4	2013-2014	Sijo Kuruvilla	C.E.O. Startup Village	Startup Village	CESA Inauguration
5	2013-2014	Hithesh Choudary	Hacking Professional	Tech Defense Ahmedabad.	workshop
6	2012-2013	Dr. A.K. George			talk

7	2011-2012	Hiran Venugopal	C.E.O. Ubiquirio, C.T.O. Saltmangotree	C.E.O. Ubiquirio, C.T.O. Saltmangotree	talk on "Free & Open Source Software
8	2011-2012	Dr. R. Saravanan	Professor	VIT University, Vellore	workshop
9	2011-2012	Anil Kumar S	Professor	Govt. Engineering College, Idukki	workshop
10	2011-2012	Dr. Sudeep K S,	Professor	NIT Calicut	workshop
11	2011-2012	Dr. K. Lakshmanan	Professor	VIT University, Vellore	workshop

Engineering events organized by Professional societies/chapters

Year	Event	Associated with professional chapters/Industry	Date	Organized/ Resource Persons
2014-2015	Game development	CSI	30 th Jan-2015	HACKSEC
	Arduino workshop	IEEE	10 th & 11 th Oct-2014	Robotryst
2013-2014	Android App Development	CSI	12 th & 13 th Mar-2014	AppIncubator
	National Level Workshop	IEEE	7 th &8 th March-2014	Mr.Sabarimuth G Pillai(Sec.IEEE Kerala Section)
	Expert talk on Entrepreneurship	IEEE	13 th August 2013	Rev.Fr.Roy Joseph Vadakkan
	National Level Workshop	IEEE	8 th & 9 th March-2013	Mrs. Mini Ulanat (IEEE

				SAC, WIE Vice Chair – Kerala Section)
	PES Quiz 2013 State Level Quiz for First year Engg. Students	IEEE	11 th september 2013	Ms Reshma Raj C, Asst Prof, JECC, Thrissur
	Full day Robotic Workshop	IEEE	11 th september 2013	Mr.Sunil Paul,IEEE SB Counselor
	Expert talk	IEEE	13 th august 2013	Mr.Shahim Baker,Dire ctor Grey Techno labs,IEEE Kochi
	HACKTRACK	CSI and Tech defence, CESA,	29 th -30 th Aug 13	Tech defence
2012- 2013	Dennis Ritchie C Coding Contest	CSI	22 nd & 23 rd October201 2	CSI Students
	Industrial visit BSNL, Thrissur	IEEE	16 th October 2012	Ms.Reshm a Raj, Asst Prof, JECC, Thrissur

Organization of paper contests, design contests, etc., and achievements (4)

Details of paper contests and design contests

Sl. No	Events	Description	Month and Year of conduct
1	Vibhavana 2014	National level paper presentation contest	Jan 2014
2	Vibhavana 2013	National level paper presentation contest	Jan 2013
3	Vibhavana 2012	National level paper presentation contest	June 2012
4	Dennis Ritchie C Coding Contest	C coding contest	2012

Publication of technical magazines, newsletters,

Newsletter

Department Newsletter is published one in each semester highlighting the staff & student achievements, programmers organized by the department and CESA.

The image shows two pages from a department newsletter. The left page is titled 'Placement' and lists several final year students who got placed in various companies through campus recruitment. It includes a table with columns for Name, Company, and Designation. Below this is a 'Result Analysis' table with columns for Semester, Total Pass %, and University Position. The right page is the cover of the newsletter, titled 'DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING NEWSLETTER'. It includes a section for 'Our Mission', 'Our Vision', and 'H.O.D.'s Message' by Prof. Murali Krishna C. There are also photos of students and faculty members.

Entrepreneurship initiatives, product designs and innovations

Product Designs & Innovations

Sl. No	Roll No.	Name	Sem /Year	Project Title	Remarks
2013-2014					
1	JYAKECS035 JYAKECS029	Nidhish.P, Joffin Joseph	VIII/IV	Android Based Home Automation System	First Prize
2	JYALECS007, JYALECS033	Anna Varghese, Niji Devassy	VI/III	Non Linear MIMO	Participated
3	JYAMECS050 JYAMECS015 JYAMECS021	Sanjo Simon, Jovis Joseph & Gijo Vargheese	III/II	Developed digital Lamp App for the inaugural purpose for the future events	CESA 2013 inaugurated with digital lamp
4	JYALECS034, JYALECS013, JYALECS046, JYALECS001	Nishal Govind, Arun Jose, Sreenath V ,Abin Joy	VI/III	Line Tracer Robot	Participated
5	JYAKECS001, JYAKECS012, JYAKECS041,	Ancy Antony, Athira T G, Raseena K H,	VIII/IV	Genetic algorithm for energy efficient shortest path routing in wireless sensor network-participated	Participated
6	JYAKECS014 JYAKECS036 JYAKECS040	Babitha Babu Pelja Paul Rajeev C P	VIII/IV	proxy based content centric networking with packet loss	Won second prize

				avoidance over wireless system	
7	JYALECS039, JYALECS006, JYALECS040, JYALECS001	Shilpa Anto, Anjitha Chandran, Shilpa George, Abin joy	VI/III	Automatic Railway GATE	Participated

Activities of EDC

Sl.No	Event	Date	Venue	Description	Organized/Resource Person
2014-2015					
1.	Entrepreneurship Day Celebration and Inauguration	23/10/2014	JEC	Launch of website & logo release.	Ms. Deena Venugopal (Founder of Anabytes) & Mr. Rajeev Krish (Founder and Director, WAUM Team).
2.	EDC Programme	12/09/2014	Adlux International Convention Centre, Kochi	To promote entrepreneurship among College Students	Govt. of Kerala
3.	Startup 2020	22/08/2014	GEC, Thrissur	Four members out of 20 students were selected as the final team representing Jyothi Engineering College	NASSCOM
4.	Motivational Talk	04/07/2014	JEC	The senior director of NASSCOM – Mr. Purushothaman presided over the meeting and	EDC of JEC

				gave the keynote.	
2013-2014					
	Motivational Talk	28/04/2014	JEC	Talk on "Importance of Entrepreneurship in campus"	Alex P George,CEO, ALCO FASTENERS, Visiting Professor @ IIM Kozhikode & an alumnus of IIT/IIM.

Publications and awards in inter-institute events by students of the programme of study

Publications and awards of students

Sl.No	Student Name/ Class	Date(s)	Event	Institution	Prize/ Participation
2014 - 2015					
1	Ashith Wilson, Alfin Lorence	19,20 th September- 2014	Abhiyanthriki	Rajagiri school of Engg. & Technology	Participation
2	Deen ShifaZ, Akash Thomas, Jthin T V	19,20 th September- 2014	Abhiyanthriki	Rajagiri school of Engg. & Technology	Participation
3	Tessa Jose	25 th to 27 th September 2014	Azure(Best Techies)	Amal Jyothi collge of Engg.	First Prize
4	Tessa Jose	25 th to 27 th September 2014	Acon14(Quiz)	Amal Jyothi collge of Engg.	Top Five
5	Priyatha Mathew, Ronia Jose, Naveena Varghese, Joe Mathew Alappat, Joseph Chackola, Dalwin C D, Gijo Varghese, Radwin Raphel, Hasna	5 th July -2014	Managerial & Proj.Devolopme nt	FISAT	Participation

	Benny,Naija, Anietta Any Alex, Neenu				
6	Jovis Joseph	5 th July -2014	Proj.Devolopment	FISAT	Participation
7	Soorya M	15 th Aug- 2014	Sadguna Award	University of Calicut	Award
8	Jovis Joseph	13,14 th Feb-2015	Vaibhava	Vidya academy of science &Technology	Winner
9	Jovis Joseph	13,14 th Feb-2015	Parihara (debugging)	Vidya academy of science &Technology	Participation
10	Gijo Vargheese	13,14 th Feb-2015	Vaibhava	Vidya academy of science &Technology	Participation
11	Sanjo Simon	30,31 st Feb-2015	LaunchPad	GEC,Thrissur	Participation
12	Gijo Vargheese	30,31 st Feb-2015	LaunchPad	GEC,Thrissur	Participation
13	Jovis Joseph	30,31 st Feb-2015	LaunchPad	GEC,Thrissur	Participation
14	Tessa Jose	21 st Feb-2015	AVANZA	Albertian Institute of Science &Technology	Participation
15	Arun	23 rd January-2015	Counter Strike	Jyothi engineering college	First
16	Arun J.P	13,14 th Feb-2015	Chase a Treasure	Vidya academy of science &Technology	Participation
17	Christo Joy Vargheese, Arjun T.A	13,14 th Feb-2015	Inquizite	Vidya academy of science &Technology	Participation

18	Christo Joy Vargheese, Arjun T.A	11 th Feb-2015	IT RENDITION	Dr.John Mathai Centre,Thrissur	Participation
19	Arjun T.A	4 th and 5 th Feb-2015	Quiz Bowl,Web development	Nehru Group of Institutions	Participation
20	Akash Thomas	4 th and 5 th Feb-2015	Mobile Photography	Don Bosco college	First
21	Ashith Wilson	4 th and 5 th Feb-2015	Hardware Assembling	Nehru Group of Institutions	First
22	Alfin Lawrence	4 th and 5 th Feb-2015	Crypt Analysis	Nehru Group of Institutions	Third
23	Jerin K.J	4 th and 5 th Feb-2015	Web Development	Nehru Group of Institutions	Participation
24	FrancisT P, ChristoJoy Varghese, Arjun T A	11 th Mar-2015	webbing	Thejus Engineering College	Participation
25	ChristoJoy Varghese, Arjun T A	11 th Mar-2015	Quiz	Thejus Engineering College	Participation
26	Jovis Joseph	11 th Mar-2015	webbing(web design)	Thejus Engineering College	1st prize
27	Gijo varghese	11 th Mar-2015	webbing(web design)	Thejus Engineering College	1st prize
28	Joseph chakola , Priyatha Mathew, Roniya Jose, Dalwin CD, Liyanto P J	11 th Mar-2015	Matrix(mat lab)	Thejus Engineering College	participant
29	Tessa Jose Sneha Thomas	11 th Mar-2015	paper presentation	Thejus Engineering College	participant
30	Sanjo Simon Thasviya Haroon	11 th Mar-2015	Expo Project	Thejus Engineering College	participant

2013-2014					
1	Sanjo Simon, Jovis, Joe, Justin	6 th & 7 th January-2014.	ICE-FOSS	FISAT Free Software Cell (FFSC)	Participation
2	Sanjo Simon, Safwan, Moidu Krishna Prasad, Gijo Varghese, Joe Mathew	September-2013	Overnight coding, Dhyuthi	GEC, Thrissur	Participation
3	Jeffin Thomas,	9 th , 10 th , & 11 th August-2013	'Algoorythm 2k13'	Vimal Jyothi Engineering College, Kannur	1 st prize
4	Joe Mathew, Dalwin Davis, Sanjo Simon & Radwin Raphael	September-2013	Dungeons of Dyuthi	GEC, Thrissur.	1 st prize
5	Anna Francis, Sangeetha Sunny	21 st February-2014	Paper presentation	Adi Shankara Institute of Engg, Kalady	Participation
6	Swathy Ramdas, Anna Rose V	21 st February-2014	Paper presentation	Adi Shankara Institute of Engg. Kalady	Participation
7	Shilna Latheef, Rahul K	21 st February-2014	Paper presentation	Adi Shankara Institute of Engg. Kalady	Participation
8	Jili G Vadakkoot, Tinu Wilson	21 st February-	Paper presentation	2 nd National Conference on	Participation

		2014		Innovations in Computer Technology & Communication, EASA College, CBE	
9	Nidhish P, Joffin Joseph	March 2014	Paper presentation	Malabar College of Engg & Technology	1 st PRIZE
10	Ashish Dinesh, Rahul Krishna, Christo	March 2014	Paper presentation	Malabar College of Engg & Technology	Participation
11	Anju John, Pelja	March 2014	Paper presentation	Malabar College of Engg & Technology	2 nd prize
12	Sanjo Simon, Ashwin S Nath	14 th to 16 th February - 2014	FOSSMeet	NIT Calicut	Participation
13	Soorya M	21 st February 2014	Poster Design	MES College Kuttippuram	Second
14	Vinaya K.Viswanath	21 st February- 2014	Caption Writing	MES College Kuttippuram	First
15	Neethu K.S	21 st February -2014	Caption Writing	MES College Kuttippuram	Second
16	Anna Varghese	21 st February- 2014	Caption Writing	MES College Kuttippuram	Third
17	Soorya M	21 st February-	Essay Writing	MES College	First

		2014		Kuttippuram	
18	Niji Devassy	21 st February- 2014	Essay Writing	MES College Kuttippuram	Second
19	Rani mol Joseph, Sini Jose, Arun Jose, Joice Joseph, Soorya M	7 th and 8 th March 2014	Hasten Master	Vidya AcademyTh risuur	Participatio n
20	Christina Chacko, Shilpa Anto. Anjitha Chandran, Anna Varghese	7 th and 8 th March 2014	Tech talk	Vidya AcademyTh risuur	Participatio n
21	Joel Raju P, Neethu KS, Arun Jose, Abin Joy, Niji Devassy, Soorya M, Sreenath V, Jeffin Thomas, Ann Teressa	7 th and 8 th March 2014	Unriddle	Vidya Academy Thrisuur	Participatio n
22	Niji Devassy, Soorya M, Sreenath, Joice Joseph, Nishal KR, Jeffin Thomas, Kiran KV, Donia, Joel Raju P, Ann Theressa, Neethu KS, Abin Joy, Arun Jose	7 th and 8 th March 2014	Infinite loop	Vidya Academy Thrisuur	Participatio n

23	Akhil AS, Cijo Jose	11 th september20 13	Robotics workshop	Jyothi engineering college	Participatio n
24	Merin Jose	7 th & 8 th March 2014	Google geek	Vidya Academy Thrisuur	Participatio n
25	Joice Joseph	24 th & 25 th Jan2014	Silent Scream	Jyothi engineering college	Second
26	Akhil AS, Varghese John	6 th & 7 th March2014	Paper presentation	Malabar college	Participatio n
27	Bobin Jose, Joice Joseph, Soorya M,Sreenath V, Neethu KS, Joel Raju	6 th & 7 th March2014	Bug Smash	Malabar college	Participatio n
28	Akhil AS,	6 th & 7 th March2014	Web designing	Malabar college	Participatio n
29	Joice joseph, Neethu KS, Jeffin Thomas, Abin Joy, Nishal KR, Sreenath V	6 th & 7 th March2014	Treasure hunt	Malabar college	Third
30	Akhil AS	6 th & 7 th March2014	Bug Smash	Malabar college	First
31	Arun Jose	6 th & 7 th March2014	Bug Smash	Malabar college	Second
32	Joel Raju	6 th & 7 th March2014	Web	Malabar college	Second

			Designing		
33	Nishal KR	21 st to 23 rd February - 2014	coding	MES College	participatio n
34	Anna Varghese, SreenathV, Soorya M,Manu David, Arun Jose, Joice Joseph, Abin Joy, Abin Roy, Kiran, SreenathV, Niji Devassy, Jeffin Thomas	21 st to 23 rd February - 2014	coding	MES College	First
35	Soorya M,Neethu, Anna Varghese, Vinaya K Viswanath	21 st to 23 rd February - 2014	Web developing	MES College	Participatio n
36	Anna Varghese, SreenathV, Soorya M,Manu David, Arun Jose,Joice Joseph,Abin Joy, Abin Roy, Kiran, SreenathV, Niji Devassy, Jeffin Thomas	21 st to 23 rd February - 2014	Treasure Hunt	MES College	Participatio n
37	Cijo Jose, Varghese John, Kiran KV	14 th to 16 th February - 2014	FOSSMeet	NIT Calicut	Participatio n
38	Varghese John	1 st February - 2014	Android live appathon	Zybotech lab cochin	Participatio n

39	Cijo Jose	9 th to 11 th August-2013	'Algorhythm 2k13'	Vimal Jyothi Engineering College, Kan nur	Participatio n
40	Neethu KS, Niji Devassy, Anna Varghese	11 th to 13 th September- 2013	Dyuthi13	GEC Thrissur	Participatio n
41	Nishal KR, Jeffin Thomas	6 th , & 7 th Septe mber-2013	Line Tracer	FISAT	Participatio n
42	Jeffin Thomas	27 th & 28 th January-2014	LAN Gaming	Don Bosco College	Second
43	Anila Baby	24 th & 25 th January-2014	Waste Wise	Jyothi Engineering college	First
2012-2013					
1	Anna Varghese	8 th & 9 th March 2013	Web develpment	Jyothi engineering college	Participatio n
2	Cijo Jose	23 rd February- 2013	Techdays (Microsoft)	Techdays Kottayam	Participatio n
3	Jeffin Thomas, Cijo Jose, Kiran KV	20 th to 22 nd September- 2012	Dyuthi12	GEC Thrissur	Participatio n
4	Antony Varghese, Nishal KR, Abin Joy, Arun Jose	22 th to 23 rd February 201 3	Dhishna'13	CUSAT	Participatio n
5	Jeffin Thomas	1 st & 2 nd March 2013	NFS Gaming	METS Mala	sixth
6	Nishal KR, Antony Varghese, Arun Jose, Manu David, Kiran KV, Sreenath V	6 th February- 2013	Techfest	Sahrudaya Engineering college	participatio n
7	Jeffin Thomas, Cijo Jose	6 th February 2013	Online Bonanza	Sahrudaya Engineering college	Second
Publications					

2014-2015					
Sl No	Names of students	Name of paper	Name of journal	Date/issue	published
1	Neethu.K.S, Jisna C Kuriakose Ann Maria	A step towards better home automation using different wireless technologies	International Journal of Advanced Research in Information and Communication Engineering	February 2015	Published
2	Sooraj Antony, Manu David	Arduino shield based energy efficient-globally controllable home automation system	International journal of advanced research in computer science and applications	February 2015	Published
3	Niji Devassy, Sreenath V	Security Using Armstrong Number And Authentication Using Colour	International Journal Of Advanced Research In Datamining And Cloud Computing	February 2015	Published
4	Gayathri , Christina Chacko	Automatic Caption Generation For Images: A Review	International journal of advanced research in computer science and applications	February 2015	Published
5	Bobin Jose , Jerrin James	A Method For Automatic Caption Generation Of Images	International Journal Of Advanced Research In Datamining And Cloud Computing	February 2015	Published

6	Annmary John, Veena P V	Comparative Study On Packet Filtering Mechanisms	International Journal of Advanced Research in Information and Communicatio n Engineering	February 2015	Published
7	Soorya M, Joice Joseph, M K Arun	Datapacket Filtering Mechanism For Networks	International Journal of Advanced Research in Information and Communicatio n Engineering	February 2015	Published
8	Anna Varghese, Roshmy George, Swathi Anil,	Comparitive Study on Internet Radio using Raspberry Pi	Journal of Environmental Science, Computer Science and Engineering & Technology	February 2015	Published
9	Abin Roy , Anna Varghese, Joel Raju	Next Generation Internet Radio	Journal of Environmental Science, Computer Science and Engineering & Technology	February 2015	Published
10	Merin Jos , Shilpa George, Vinaya K Viswanath	Mobitrack:A Comparative Study On Android Mobile Tracking	International Journal Of Advanced Research In Information And Communicatio n Engineering	February 2015	Published
2013-2014					
Sl No	Names of	Name of	Name of	Date/issue	published

	students	paper	journal		
1	Anju John Divya Jose Pelja PauL.N	Proxy Based Content Centric Networking with Packet Loss Avoidance in Adhoc Network	IJCAT – International Journal of Computing and Technology	Volume 1, Issue 1, February 2014	published
2	Rajeev cp, Babitha Babu k	Direction Selective Disseminatio n Scheme in Mobile Cloud	IJCAT – International Journal of Computing and Technology	Volume 1, Issue 1, February 2014	published
3	Ashlin Antony, Aswathy B	Android Based Home Automation Using Raspberry Pi	IJCAT – International Journal of Computing and Technology	Volume 1, Issue 1, February 2014	published
4	Betsy K Abraham, Jinil James, Riya Jose	Location Based Encryption using Message Authenticatio n Code in Mobile Networks	IJCAT – International Journal of Computing and Technology	Volume 1, Issue 1, February 2014	published
5	Catherine Mathew	A study on remote home monitoring using different technologies	WARSE- International Journal of Advances in Computer Science and Technology	Volume 3, No.2, February 2014	published
6	Irene George	A study on remote home monitoring using	WARSE- International Journal of Advances in	Volume 3, No.2, February 2014	published

		different technologies	Computer Science and Technology		
7	Treesa Thomas	Cloud Mobile Social TV for Adaptive Video Streaming	WARSE-International Journal of Advances in Computer Science and Technology	Volume 3, No.2, February 2014	published
8	Dilna Jacob	Cloud Mobile Social TV for Adaptive Video Streaming	WARSE-International Journal of Advances in Computer Science and Technology	Volume 3, No.2, February 2014	published
9	Honeymol C P	Cloud Mobile Social TV for Adaptive Video Streaming	WARSE-International Journal of Advances in Computer Science and Technology	Volume 3, No.2, February 2014	published
10	Rose Mary Abraham	A Survey on Different CAPTCHA Techniqu	WARSE-International Journal of Advances in Computer Science and Technology	Volume 3, No.2, February 2014	published
11	Jili G Vadakkoot	A new image resolution technique using neighbor embedding	IJACST internationak journal of Advances in computer science and technology	Vol 3 feb 2014	published
12	Tinu winson K	A new image resolution technique using neighbor embedding	IJACST internationak journal of Advances in computer science and	Vol 3 feb 2014	published

			technology		
13	Athira Sasikumar	Security enhancement in interactive captcha	IOSR journal of computer engineering	Vol 16 mar-apr 2014	published
14	Sancy P Prakash	Security enhancement in interactive captcha	IOSR journal of computer engineering	Vol 16 mar-apr 2014	published
15	Saranya k S	Decision Support system for CRm in online shopping syatem	IJCST	VOL 3 FEB 2014	published
16	Anjana prabakaran	Decision Support system for CRm in online shopping syatem	IJCST	VOL 3 FEB 2014	published
17	Simi sojan	Techniques used in decisionsupporting syatem for CRM a review	IJITI	JAN FEB 2014	published
18	Sisifi K Raphy	Techniques used in decisionsupporting syatem for CRM a review	IJITI	JAN FEB 2014	published
19	Pinky thomas	Techniques used in decision supporting	IJITI	JAN FEB 2014	published

		system for CRM a review			
20	Swathi K V	A Survey on Different CAPTCHA Technique	WARSE- International Journal of Advances in Computer Science and Technology	Volume 3, No.2, February 2014	published
21	Jismi simon	Data Mining Technique for Heart Disease Prediction	WARSE- International Journal of Advances in Computer Science and Technology	Volume 3, No.2, February 2014	Participation
22	Liya Thomas	Data Mining Technique for Heart Disease Prediction	WARSE- International Journal of Advances in Computer Science and Technology	Volume 3, No.2, February 2014	Published
23	Sonia Joseph	Data Mining Technique for Heart Disease Prediction	WARSE- International Journal of Advances in Computer Science and Technology	Volume 3, No.2, February 2014	Participation
24		Text	WARSE-	Volume 3,	Published

	Ancy T V	Extraction From Images : A survey	International Journal of Advances in Computer Science and Technology	No.2, February 2014	
25	Athulya Chacko	Text Extraction From Images : A survey	WARSE- International Journal of Advances in Computer Science and Technology	Volume 3, No.2, February 2014	Published
26	Angel Babu	License Plate Detection and Character Recognition using Contour Analysis	WARSE- International Journal of Advances in Computer Science and Technology	Volume 3, No.2, February 2014	Published
27	Laya Therattil	License Plate Detection and Character Recognition using Contour Analysis	WARSE- International Journal of Advances in Computer Science and Technology	Volume 3, No.2, February 2014	Published

45. List the teaching methods adopted by the faculty for different programmes.

- Power point presentation
- Black board

- Seminar
- Video Lecturers

46. How does the department ensure that programme objectives are constantly met and learning outcomes are monitored?

Feed back from Stake holders

- Students
- Faculty
- Parents
- Alumni
- Management
- Employers
- Professional Bodies

47. Participation in Institutional Social Responsibility (ISR) and Extension activities.

1. Blood Donors Forum
2. Women Development Cell
3. Natura Environment Club

48. Give details of “beyond syllabus scholarly activities” of the department.

Besides class room teaching, the other methods are

- The students are assigned to carry out the project work in VI and VIII semester as part of the curriculum.
- Providing NPTEL and MIT lectures.
- Tutorial classes and Remedial classes are conducting in every semester,
- Hardware demonstrations and Simulations are using for selected topics.
- Organizing Guest Lectures from Industry and institutions.
- Organizing Industrial training and visits.
- Offering special coaching for GATE, IAS exam
- Motivate students to present technical papers in seminars.
- Advising to participate in classroom seminars, group discussions, technical quizzes to develop analytical and problem solving abilities in them and thereby, to improve their presentation skills.

- Motivating to access latest online journals, Technical magazines, and reference materials and help them to understand the emerging trends in their field of study.
- Training to use audio visual aids like power point, charts, models etc for effective presentation.
- Providing opportunities to develop their creativity by organizing intercollegiate as well as national level cultural, literary, and technical and sports competitions.
- Providing Lecture notes, Question bank and Lab manuals.

Facilities for self learning

Facilities Available: Digital Library, Department Library, E learning Resources, Central Computing Facilities, Department Labs, Workshops and Seminars and Technical Events

49. State whether the programme/ department is accredited/ graded by other agencies? If yes, give details: Nil

50. Briefly highlight the contributions of the department in generating new knowledge, basic or applied.

- Expert talk by eminent personalities based on new technology
- Training given to the students based on the new technology
- Implant training

51. SWOC analysis of the department and Future plans

Strength

- Strong faculty qualification, talented and dedicated, knowledgeable and cooperative faculty, great collaboration and good communication among faculty.
- A critical mass of faculty, quite reasonable size (almost enough to cover a variety of basic courses). High quality faculty having expertise in a broad range of modern CS fields.
- Supportive working environment among department members
- Well defined program assessment (including program objectives and course learning outcomes).
- Students involvement in department activity and various events
 - Interactions with IT companies.
- Adequate Laboratories with latest computing facilities and Computer centre
- Excellent results with good placements
- Quality final year projects which result in publication
- Disciplined students
- Participation of the students in inter-collegiate competition.

- Best Counseling Facility
- Remedial classes for the Poor students
- Faculties present papers at national and international level journals.
- Information about department activities is being published monthly.
- Lesson plan with predefined activities is prepared before starting of the course.
- The department has professional bodies like ISTE, CSI, IET
- Well stacked library with sufficient books for reference.

Weakness

- R & D work to be strengthened.
- Institute & Industry interaction process must be improved.
- Research initiatives to be increased like sponsoring staff to QIP programs with financial assistance.
- Professional skills needs to be further improved among students
- Poor External Grants and research funding.
- Need to involve more graduate students in research.
- Not many strong publications.

Opportunities:

- Lot of Scope for consultancy and research
- Faculties are allowed to upgrade the skills by attending Faculty development Programs and workshops
- Students participation in many co-curricular and extra-curricular activities in the campus can improve the communication skills and leadership qualities.
- Placement training programs, GATE Coaching and counseling organized within the campus regularly for the career guidance of the students.
- Entrepreneurship Development Centre to cater the need of entrepreneurs

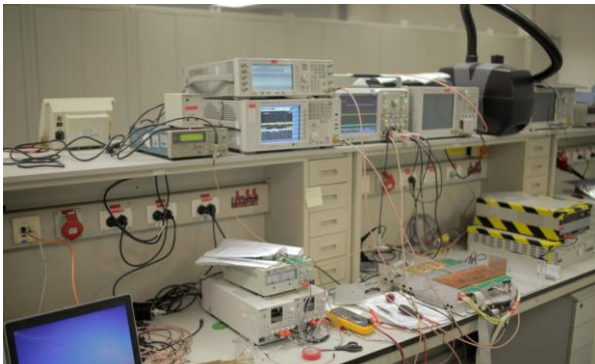
Challenges:

- Rapid changes in technology and time bound Learning & Training skills for the faculty.
- Consultancy development and IT interacts.
- Growing competition from nearby engineering colleges
- Risk of losing prominent faculty and staff for genuinely better opportunities.
- Demand is getting decreased for CSE branch due to the software Recession
- Less number of Government Jobs for CSE graduates.

52. Future plans of growth and development.

The Department has set the following goals to be achieved in the near future:

- Research oriented teaching to provide technical know-how to students
- To start specific Skill Oriented courses for benefitting the social needs
- More interaction with industries to design courses to cater to the need of society
- Formulation of faculty research group to function as a consultant to industries and other institutions
- Enhance research activity by adding more research labs & obtaining research grants from funding agencies
- Organizing State and National Level Seminars sponsored by UGC.
- Organizing National Level Competitions for the evening college.
- Conducting more guest lectures inviting expertise from the market.



DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING

1. Name of the Department : Department of Electronics and Communication Engineering

2. Year of establishment : 2002

3. Is the Department part of a School/Faculty of the university? No.

4. Names of programmes offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., D.Sc., D.Litt., etc.) : UG

Courses offered

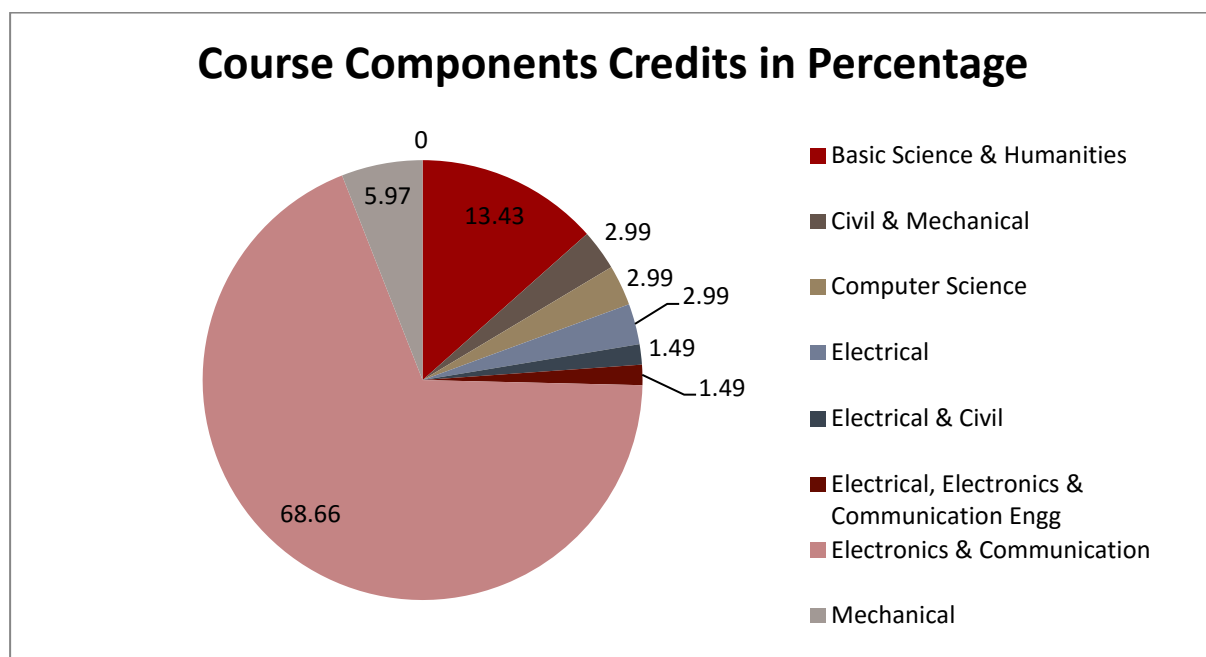
S I No.	Courses offered	Intake	When started	Specialisation
1	B. Tech	60	2002	Electronics and Communication Engineering
2	B. Tech	120	2013	Electronics and Communication Engineering

5. Interdisciplinary programmes and departments involved

Sl No.	Names of Interdisciplinary courses	Department involved
1	Engineering Mathematics I	Basic Science & Humanities
2	Engineering Mathematics II	Basic Science & Humanities
3	Engineering Mathematics III	Basic Science & Humanities
4	Engineering Mathematics IV	Basic Science & Humanities
5	Engineering Physics	Basic Science & Humanities
6	Physics Lab	Basic Science & Humanities
7	Engineering Chemistry	Basic Science & Humanities
8	Chemistry Lab	Basic Science & Humanities
9	Engineering Mechanics	Civil & Mechanical
10	Basics of Civil & Mechanical Engg	Civil & Mechanical
11	Basics of Electrical, Electronics & Communication Engg	Electrical, Electronics & Communication Engg
12	Engineering Graphics	Mechanical
13	Computer Programming in C	Computer Science
14	Mechanical workshop	Mechanical
15	Electrical & Civil Workshop	Electrical & Civil
16	Humanities & Communication Skills	Basic Science & Humanities
17	Environmental Science	Electrical
18	Mechanical Engg	Mechanical
19	Mechanical Engg Lab	Mechanical
20	Humanities and Social Sciences	Electronics & Communication
21	Network Analysis & Synthesis	Electronics & Communication
22	Signals and Systems	Electronics & Communication

23	Digital Electronics	Electronics & Communication
24	Electrical Engineering	Electronics & Communication
25	Digital Electronics Lab	Electronics & Communication
26	Electrical Engineering Lab	Electrical
27	Electronic circuits	Electronics & Communication
28	Analog communication	Electronics & Communication
29	Computer organization & architecture	Electronics & Communication
30	Solid state devices	Electronics & Communication
31	Electronic circuits lab	Electronics & Communication
32	Analog communication lab	Electronics & Communication
33	Digital Signal Processing	Electronics & Communication
34	Control Systems	Electronics & Communication
35	Electromagnetic Field Theory	Electronics & Communication
36	Digital Communication	Electronics & Communication
37	Microprocessors & Microcontrollers	Electronics & Communication
38	Linear Integrated Circuits	Electronics & Communication
39	Microprocessors & Microcontrollers Lab	Electronics & Communication
40	Linear Integrated Circuits Lab	Electronics & Communication
41	Basics of VLSI design	Electronics & Communication
42	Engineering Economics and Principles of Management	Electronics & Communication
43	Radiation and Propagation	Electronics & Communication
44	Control Systems	Electronics & Communication
45	Optical Communication	Electronics & Communication
46	Digital Communication & DSP lab	Electronics & Communication
47	mini project	Electronics & Communication
48	Information Theory and Coding	Electronics & Communication
49	Microwave Engineering	Electronics & Communication
50	Analog MOS Circuits	Electronics & Communication
51	Digital System Design	Electronics & Communication
52	Communication systems Lab	Electronics & Communication
53	VLSI Design Lab	Electronics & Communication
54	Project	Electronics & Communication
55	Data & Communication Network	Computer Science
56	Wireless Mobile communication	Electronics & Communication
57	Seminar	Electronics & Communication
58	Project	Electronics & Communication
59	Viva Voce	Electronics & Communication
60	Elective	Electronics & Communication
61	Power Electronics	Electronics & Communication
62	Satellite Communication	Electronics & Communication
63	Biomedical Instrumentation	Electronics & Communication
64	Television & Radar Engineering	Electronics & Communication

65	Mechatronics	Electronics & Communication
66	Cryptography & Network security	Electronics & Communication
67	Mobile computing	Electronics & Communication



6. Courses in collaboration with other universities, industries, foreign institutions, etc.

Sl. No.	Name of Industry/Organization	Activities through the MoU
1	Ace components & electrical ltd	Industrial Visit& Industrial training
2	CEDICOM	Technical Workshop for students
3	Ace components & electrical ltd	Industrial Visit& Industrial training, Employment to students
4	Spinner Group of Companies	TechnicalTalk, Industrial Visit

7. Details of programmes discontinued, if any, with reasons: Nil

8. Examination System: Annual/Semester/Trimester/Choice Based Credit System : Semester

B. Tech programme	
I Year	Annual
II Year	Semester
III Year	Semester
IV Year	Semester

9. Participation of the department in the courses offered by other departments

Sl No.	Courses name	Offered to (Dept.)
1	STP on Power System Control Using Power Electronics	EEE,ECE,AEI
2	Effectiveness in Teaching –Learning Process	ECE,EEE,AEI,ME
3	STP Emerging Trends in power electronics and system	ECE,EEE,AEI,ME
4	Mobile Communication	ECE,CSE,IT,EEE
5	Emerging trends in science and current affairs	Maths, ECE,CSE,IT,EEE

10. Number of teaching posts sanctioned, filled and actual (Professors/Associate Professors/Asst. Professors/others)

	Sanctioned	Filled
Professors	-	1
Associate Professors	-	-
Assistant Professors	-	23

11. Faculty profile with name, qualification, designation, area of specialization, experience (D.Sc./ D.Litt. /Ph.D. / M. Phil. etc.,)

Sl No.	Name	Qualification	Designation	Specialization	Years of experience
1	Dr. Jose P Therattil	Ph.D	Professor & Head of the Department	Power Systems	11
2	Ms. Shiny M I	M.E	Asst. Professor	Applied Electronics	7
3	Mr. Dipinkrishnan R	M.E	Asst. Professor	Communication Systems	6
4	Ms. Sindhu S	M.Tech	Asst. Professor	Power Electronics	7
5	Mr. Jinesh K J	M.Tech	Asst. Professor	Embedded Systems	5
6	Mr. Abraham P A	M.Tech	Asst. Professor	Embedded Systems	5
7	Mr. Abin Johns Raju	M.Tech	Asst. Professor	Communication Systems	4
8	Ms. Bindhu K Rajan	M.Tech	Asst. Professor	Signal Processing	4
9	Ms. Nishamary P	M.Tech	Asst. Professor	Embedded Systems	3
10	Ms. Anjitha V	M.Tech	Asst.	Microwave and	2

			Professor	Television Engineering	
11	Ms. Ambily Francis	M.Tech	Asst. Professor	Applied Electronics	5
12	Ms. Roshni Roges	M.Tech	Asst. Professor	Communication Systems	2
13	Ms. Asha John	M.Tech	Asst. Professor	Power Electronics	3
14	Ms. Shainu Paulose	M.Tech	Asst. Professor	Applied Electronics	4
15	Ms. Drisya M K	M.Tech	Asst. Professor	Applied Electronics	6
16	Ms. Alice K Paul	M.Tech	Asst. Professor	Applied Electronics	8
17	Mr. Jobin Varghese	M.Tech	Asst. Professor	Telecommunication Engineering	4
18	Mr. Rijo P C	M.Tech	Asst. Professor	Very Large Scale Integration (VLSI)	1
19	Mr. Vivek Lukose	M.Tech	Asst. Professor	Sensor Systems Technology	8
20	Ms. Nyni K A	M.E	Asst. Professor	Applied Electronics	5
21	Mr. Ponmani Raja	M.Tech	Asst. Professor	Communication Systems	5
22	Mr. Kapildas K S	M.Tech	Asst. Professor	Powe Electronics	5
23	Ms. Roshni Rajan	M.Tech	Asst. Professor	Instrumentation & Control	4
24	Ms. Neethu Rose Thomas	M.Tech	Asst. Professor	Applied Electronics	2

12. List of senior Visiting Fellows, adjunct faculty, Emeritus Professors: Nil

13. Percentage of classes taken by temporary faculty – programme-wise information: Nil

14. Programme-wise Student Teacher Ratio

STR is calculated as $= (x + y + z)/N1$

where, x = Number of students in 2nd year of the programme

y = Number of students in 3rd year of the programme

z = Number of students in 4th year of the programme

N1 = Total number of faculty members in the programme (by considering fractional load)

Year	X	Y	Z	X+Y+Z	N1	STR
CAYm2 2012-2013	61	61	60	182	12	15.17
CAYm1 2013 -2014	63	61	61	185	12	15.42
CAY 2014-2015	103	63	61	227	17	13.35
CAYm2 2012-2013	61	61	60	182	12	15.17

15. Number of academic support staff (technical) and administrative staff: sanctioned, filled and actual

Year	Technical staff			Administrative staff		
	Sanctioned	Filled	Actual	-	-	-
2011-2012	NA	6	6	-	-	--
2012-2013	NA	6	6	-	-	-
2013-2014	NA	6	6	-	-	--
2014-2015	NA	7	7	-	-	-

16. Research thrust areas as recognized by major funding agencies : Nil

17. Number of faculty with ongoing projects from a) national b) international funding agencies and c) Total grants received. Give the names of the funding agencies, project title and grants received project-wise.

Nil

18. Inter-institutional collaborative projects and associated grants received a) National collaboration b) International collaboration

Nil

19. Departmental projects funded by DST-FIST; UGC-SAP/CAS, DPE; DBT, ICSSR, AICTE, etc.; total grants received. : Nil

20. Research facility / centre with

state recognition : 2

national recognition : 3

international recognition Nil

21. Special research laboratories sponsored by / created by industry or corporate bodies :

Nil

22. Publications:

*** Number of papers published in peer reviewed journals (national / international)**

*** Monographs: Nil**

*** Chapters in Books: Nil**

*** Edited Books : Nil**

*** Books with ISBN with details of publishers : Nil**

*** Number listed in International Database (For e.g. Web of Science, Scopus, Humanities International Complete, Dare Database - International Social Sciences Directory, EBSCO host, etc.)**

*** Citation Index – range / average : Nil**

*** SNIP : Nil**

*** SJR : NIL**

*** Impact Factor – range / average : 6**

*** h-index : 2**

i. Dr Jose P Therattil (Professor & Head)

Conferences

- a. Therattil, Jose P., Panda, P. C. 2011. MODELING AND CONTROL OF A MULTI-MACHINE POWER SYSTEM WITH FACTS CONTROLLER. International Conference on Power and Energy Systems (ICPS-2011) . Organized by Department of Electrical Engineering at IIT Madras on 22-24 Dec. pp.1-6.
- b. Therattil, Jose P., Panda, P.C. 2011. NONLINEAR MODEL AND CONTROL OF A TWO AREA POWER SYSTEM WITH UNIFIED POWER FLOW CONTROLLER. Proceedings of the EE Centenary Conference at IISc, Bangalore on 15-17 Dec. pp. 334-339.
- c. Therattil, Jose P., Panda, P.C 2011. TRANSIENT STABILITY ENHANCEMENT OF A POWER SYSTEM WITH UNIFIED POWER FLOW CONTROLLER USING POLE PLACEMENT TECHNIQUE. Proceedings of 35th National system conference (NSC-2011). Organized by Department of Electrical Engineering at IIT Bhubaneswar on 9-11 Dec. pp. 37-46.
- d. Therattil, Jose P., Panda, P.C. 2011. A NONLINEAR CONTROL TO UNIFIED POWER FLOW CONTROLLER FOR POWER OSCILLATION DAMPING,” Proceedings of 3rd

International conference on advances in energy research (ICAER-2011). Organized by Department of Energy Sciences and Engineering at IIT Bombay on 9-11 December.

- e. Therattil, Jose P., Panda, P.C. 2011.A NOVEL ADAPTIVE CONTROL FOR A POWER SYSTEM WITH UNIFIED POWER FLOW CONTROLLER. Proc. 3rd International conference on advances in energy research (ICAER-2011). Organized by Department of Energy Sciences and Engineering at IIT Bombay on 9-11 December.
- f. Therattil, Jose P., Panda, P.C. 2011.DAMPING OF POWER SYSTEM OSCILLATIONS USING AN ADVANCED UNIFIED POWER FLOW CONTROLLER.IEEE Ninth International Conference on Power Electronics and Drive Systems (PEDS). on 5-8 December pp.128-132.
- g. Therattil, Jose P., Panda, P.C. 2011.DYNAMIC STABILITY ENHANCEMENT USING AN ADAPTIVE UNIFIED POWER FLOW CONTROLLER.TENCON IEEE Region 10 Conference on 21-24 November pp.908-912.
- h. Therattil, Jose P., Panda, P.C.2011.IMPROVING DYNAMIC STABILITY OF A POWER SYSTEM USING ADAPTIVE STATIC SYNCHRONOUS SERIES COMPENSATOR.TENCON 2011 -IEEE Region 10 Conference on 21-24 November pp.928-932.
- i. Therattil, Jose P., Panda, P.C. 2010.DYNAMIC STABILITY ENHANCEMENT OF A MULTI-AREA MULTI-TERMINAL DC-AC SYSTEM WITH SELF-TUNING STATIC VAR COMPENSATOR.Joint International Conference Power Electronics, Drives and Energy Systems (PEDES) &2010 Power India. Organized by IIT Delhion 20-23 December pp.1-6.
- j. Therattil, Jose P., Panda, P.C.2010.DYNAMIC STABILITY ENHANCEMENT USING SELF-TUNING STATIC VAR COMPENSATOR.India Conference (INDICON) 2010 Annual IEEE on 17-19 December pp.1-5.
- k. Therattil, Jose P., Panda, P. C. 2010.TRANSIENT STABILITY ENHANCEMENT OF A MULTI-MACHINE POWER SYSTEM WITH ADAPTIVE CONTROLLED STATIC REACTIVE POWER COMPENSATOR.International conference on electrical power and energy systems (ICEPES-2010).Organized by MANIT Bhopal on 26-28 August.
- l. Therattil, Jose P., Panda, P. C.2010.TRANSIENT STABILITY ENHANCEMENT OF A MULTI-MACHINE POWER SYSTEM WITH ADMITTANCE MODEL STATIC REACTIVE POWER COMPENSATOR.Communications in Computer and Information Science, 2010, Volume 102, part 1, pp.37- 41 (Springer Link).
- m. Narne, R., Panda, P. C.,Therattil, Jose P.2011.TRANSIENT STABILITY ENHANCEMENT OF SMIB SYSTEM USING PSS AND TCSC-BASED

CONTROLLERS.IEEE Ninth International Conference on Power Electronics and Drive Systems (PEDS).on5-8 December pp.214-218.

- n. Laxmidhar, Sahu., Therattil, Jose P., Panda, P.C.2011.STUDY OF SHUNT FACTS-BASED CONTROLLERS EFFECTIVENESS ON MULTI-MACHINE POWER SYSTEM STEADY STATE OPERATION.Advanced materials research, vol. 403-408. pp. 4926-4933.
- o. Narne, R., Therattil, Jose P., Sahu, L., Panda, P.C.2011.DYNAMIC STABILITY ENHANCEMENT USING SELF-TUNING STATIC SYNCHRONOUS COMPENSATOR.International Conference on Process Automation, Control and Computing (PACC) on July 20-22 pp.1-5.
- p. Therattil, Jose P., Panda, P.C. 2012.NONLINEAR DYNAMIC MODELING AND ADAPTIVE CONTROL OF A POWER SYSTEM WITH UNIFIED POWER FLOW CONTROLLER.Electric Power Components and Systems, Vol. 40: No. 14. pp. 1544-1561.
- q. Therattil, Jose P., Panda, P.C,ADVANCED NONLINEAR CONTROL FOR A MULTI-AREA POWER SYSTEM WITH UNIFIED POWER FLOW CONTROLL on Electric Power Components and Systems, Taylor & Francis

Journals under review

- r. Therattil, Jose P., Panda, P.C.HYBRID CONTROL AND DYNAMIC MODELING FOR A POWER SYSTEM WITH UNIFIED POWER FLOW CONTROLLER.European Transactions on Electrical Power, Wiley, under review
- s. Therattil, Jose P., Panda, P.C.,MODELING AND CONTROL OF A MULTI-AREA POWER SYSTEM WITH UNIFIED POWER FLOW CONTROLLER,.,Sadhana - Academy Proceedings in Engineering Sciences, Springer, under review

ii. Ms. Sindhu S (Asst. Professor)

- a. Sindhu.S, Sindhu M.R, ManjulaG.Nair, Ginnes.K.John 2011.IMPLEMENTATION OF THREE PHASE SHUNT HYBRID FILTER USING ICOS ALGORITHM . Asian Power Electronics Journal,Vol:5 No.1.
- b. Asha Jos, Sindhu.S, Sindhu M.R,T.N.P.Nambiar 2014.“DESIGN AND SIMULATION OF AN IMPROVED ALGORITHM FOR THREE PHASE SHUNT ACTIVE FILTER.IJAER,Vol 10,No.1,pp844-849

- c. Arjun R, Sindhu.S, Sindhu M.R,T.N.P.Nambiar,2015. POWER QUALITY COMPENSATION FOR AN INDUCTION MOTOR DRIVE WITH UPQC”;IJAER,Vol 10,No.20,pp15227-15236.
- d. Sindhu.S, Sindhu M.R,T.N.P.Nambiar,2015. AN EXPONENTIAL COMPOSITION ALGORITHM BASED UPQC FOR POWER QUALITY ENHANCEMENT. International conference on smart grid Technologies (ICGST) 2015, Aug6-8

iii Ms Shiny M I (Asst. Professor)

- a. Shiny M.I 2010,LOW POWER CLOCKING SCHEMES FOR DIGITAL SYSTEMS.International Conference atAmal Jyothi College of Engineering Kottayam .

iv Mr. Abraham Pollayil Alexander (Asst. Professor)

- a. P.A Abraham,Jose P Therattil.2014.ADVANCED MODELING AND CONTROL OF A POWER SYSTEM WITH UPFC.IEEE 8th International Power Engineering and Optimization Conference (PEOCO 2014).at Langkawi on 24-25 March pp154-159.
- b. P.A Abraham, Dr. K.A. Narayanankutty and Dr.T.N. PadmanabanNambiar 2011.WIRELESS EMBEDDED SYSTEM FOR POWER LINE MONITORING.BonfringInternational Journal of power System and integrated Circuits Vol 1, Special Issue.

v Mr. Abin Johns Raju (Asst. Professor)

- a. Abin Johns Raju 2011.PERFORMANCE ANALYSIS OF WIMEDIA PHY USING LDPC CODES.National conference Organized by Department of Electronics and Communication Engineering SRM University .
- b. Abin Johns Raju 2011.ADVANCEMENT OF 4G IN MOBILE COMMUNICATION. National seminar organized by Institution of Engineers and Jyothi Engineering College, Cheruthuruthy.
- c. Abin Johns Raju 2013.A COMPARATIVE STUDY OF LDPC CODES AND CONVOLUTION CODES IN WHY MEDIA PHY in December .
- d. Abin Johns Raju 2014.AN ANALYTICAL APPROACH TO THE PERFORMANCE OF LOW DENSITY PARITY CHECK CODES in December.
- e. Abin Johns RAJU STABILITY CONTROL UPFC2014. IEEE 8th International Conference on Power Engineering and Optimization Conference (PEOCO 2014).

- f. George, N., Neshma, A.N. ; Nanditha, K. ; Francis, J. ; Joseph, J. ; Sarika, K.T. ; Raju, A.J.2014. A CHANNEL CODER DESIGN FOR A NOVEL HIGH SPEED COMMUNICATION SYSTEM. IEEE International Conference ICAECC at Bangalore on 10-11 Oct. pp1-5

vi Ms. Nisha Mary P (Asst. Professor)

- a. Nisha Mary P 2011.OPTICAL THRESHOLD IN IMAGE PROCESSING USING FUSSY MEASURES.National conference organized by Info Institute of Engineering Coimbatore .

vii. Ms. Bindhu K Rajan (Asst. Professor)

- a. Bindhu K Rajan. 2015. FUSION OF IRIS & FINGERPRINTS BIOMETRICS FOR GENDER CLASSIFICATION USING NEURAL NETWORK.International Conference on Current Trends in Engineering & technology (ICCTET 2014). At Akshaya College of Engineering & Technology Coimbatore on 8 July. pp.216-221.
- b. Bindhu K Rajan. 2015. DURATION MODELLING IN TEXT TO SPEECH SYNTHESIS FOR MALAYALAM LANGUAGE. International Conference on Circuit, Power and Computing Technologies (ICCPCT 2015), at Noor Isam University, Tamil Nadu on 19-20 March 2015. pp.1-5
- c. Bindhu K Rajan. 2011. DURATION MODELLING IN TEXT TO SPEECH SYNTHESIS FOR MALAYALAM LANGUAGE. 12th National Conference (NCCTT 2011).at College of Engineering Trivandrum on 19-20 Aug 2011.

viii. Ms. Anjitha V (Asst. Professor)

- a. V.Anjitha, Santhosh Kumar S.2012.OPTICAL DESIGN OF ZIG ZAG ANTENNA USING NON LINEAR SEGMENT LENGTH AND PITCH ANGLE . Proceeding technology ,ELSEVIER.
- b. V.Anjitha, Santhosh Kumar S 2012. OPTIMAL DESIGN OF ZIG-ZAG ANTENNA WITH NONLINEAR SEGMENT LENGTH AND PITCH ANGLE USING B-SPLINE MODELING. National conference at College of Engineering Trivandrum.Vol:6, pp 799–805
- c. Anphy Jose, Deepa Merlin Dixon K, NaijiJoseph,Silpa George E,& Anjitha2014.PERFORMANCE ENHANCEMENT OF EDGE DETECTION OPERATORS. International Conference on Embedded Systems ICES.

ix. Ms. Krishnapriya S (Asst. Professor)

- a. Krishnapriya S, Komaragiri, R.2011.‘GE SOURCE GE CHANNEL SI DRAIN TFET FOR LOW POWER APPLICATIONS. IEEE international conference on microelectronics and Renewable Energy at Kanjirapally on 4-6 June pp 1-5.

- x. Ms. Drisya M K (Asst. Professor)**
 - a. Drisya M K 2012.COMPRESSION OF FPGA COMPRESSION-A COMPARISON. Bonfring International journal of power systems and Integrated circuits Special Issue on Communication Technology Interventions for Rural and Social Development in February .
- xi. Ms. RoshniRoges (Asst. Professor)**
 - a. RoshniRoges,NEURAL NETWORK BASED LUNGS CANCER DIAGNOSIS USING PET/ CT IMAGES.National Conference on Artificial Intelligence
- xii. Ms. Roshini K Rajan (Asst. Professor)**
 - a. Roshini K Rajan,Alice K Paul. 2014.METHODS TO REDUCE POWER DISSIPATION IN FPGA.International journal for electronics and communication(IJECE) vol:3,issue:3,may 2014,issn2278-9901
- xiii. Ms. ShainuPaulose (Asst. Professor)**
 - a. Shainu Paulose 2010.CHANNEL EQUALIZATION FOR UNDER WATER MIMO OFDM SYSTEMS.International conference on intelligence science and technology.
- xiv. Mr. Jobin Varghese (Asst. Professor)**
 - a. Jobin Varghese 2013.MANAGEMENT OF ENERGY IN WIRELESS SENSOR NETWORKS WITH ENERGY STARVING SENSORS.International journal of International Organization of Scientific Research (IOSR) .
 - b. Jobin Varghese, S. Viswanatha Rao 2014. PERFORMANCE ANALYSIS OF SYNCHRONOUS AND RECEIVER INITIATED MAC PROTOCOLS UNDER VARYING TRAFFIC DENSITY OVER WIRELESS SENSOR NETWORKS
Proceedings of IEEE International Conference on Control, Instrumentation, Communication& Computing Technologies Organised by IEEE at Noorul Islam University, Kanyakumari on July 10-11, 2014 pp 1228-1232,ISBN 978-1-4799-4191-9.
 - c. Jobin Varghese, Luxy Mathews,2014. LOW POWER AREA OPTIMIZED NOVEL ARCHITECTURE FOR SOFTWARE DEFINED RADIO IN FPGA. Proceedings of IEEE International Conference on Advanced Communication, Control and computing Technologies organised by IEEE at Syed Ammal Engineering College, Ramanathapuram on 8-10 May 2014 PP 522 – 526,ISBN No:978-1-4799- 3914-5/14/\$31.00 2014 IEEE.
 - d. Jobin Varghese, S.Viswanatha Rao 2014. PERFORMANCE ANALYSIS OF SMAC AND TDMA PROTOCOLS UNDER VARYING TRAFFIC DENSITY OVER WIRELESS SENSOR NETWORKS.Proceedings of Elsevier Science and Technology in International

Multi Conference on Innovations in Engineering and Technology organized by Elsevier at Vijaya Vittala Institute of Technology, Bangalore on 21-23 August 2014.

- e. Jobin Varghese 2014. OPTIMIZED AREA ARCHITECTURE FOR THE OF DIGITAL FREQUENCY MODULATED AUDIO SIGNALS USING FPGA. Proceedings of International Conference on Signal and Speech Processing organised by Elsevier Science and Technology at TKM Engineering College, Kollam, on 21-22 August 2014 ELSEVIER PP 95-99 ,ISBN No: 9789351072696.
- f. Jobin Varghese 2014. DYNAMIC DUTY-CYCLED MAC FOR WIRELESS SENSOR NETWORKS WITH ENERGY HARVESTERS. Proceedings of The International Conference on Communication, Circuits, Control and Computing (I4C 2014)-IEEE organised by IEEE at M. S Ramaiah Institute of Technology, Bangalore on Nov 21-22, 2014 pp 156-160.

xv. Mr. Jinesh K J (Asst. Professor)

- a. Jinesh K. J, Rosemay John, Finky Francis, Joe Neelanakavil, Alwin Antony. 2014. SMART PUBLIC TRANSPORT SYSTEM. Proceedings of International Conference on Embedded Systems (ICES) at Amrita School of Engineering, Coimbatore on 7th May .
- b. Dixon, K.D.M. ; Anto, A. ; Anumary, M.V. ; Micheal, D. ; Jose, F. ; Jinesh, K.J. 2014. ADVANCED LICENSE PLATE RECOGNITION SYSTEM FOR CAR PARKING. International Conference on Embedded Systems ICES at Coimbatore on 3-4 July pp 162-165

xvi. Ms. Alice K Paul (Asst. Professor)

- a. Roshini K Rajan 2014. METHODS TO REDUCE POWER DISSIPATION IN FPGA. International journal for electronics and communication (IJECE) vol:3, issue:3, may 2014, issn 2278-9901.
- b. Alice K Paul 2014 .CONTROL AND AUTOMATION OF INSTRUMENT AIR SYSTEM USING PLC. National Conference on Emerging Electronics '14 FEB 2014

xvii. Ms. Nyni K A (Asst. Professor)

- a. Neethu Rose Thomas 2014. DETECTION OF MACULA IN RETINAL IMAGES USING MORPHOLOGY. International Journal of Advanced Research in Computer Science and Software Engineering. Vol. No: 4 Issue 1.

xviii Ms Neethu Rose Thomas (Asst. Professor)

- a. Neethu Rose Thomas 2014.DETECTION OF MACULA IN RETINAL IMAGES USING MORPHOLOGY.International Journal of Advanced Research in Computer Science and Software Engineering. Vol. No: 4 Issue 1.

xviii. Ms Asha John (Asst. Professor)

- a. Asha John 2014.NITROGEN PLANT AUTOMATION USING PLC &SCADA.International Journal of General Engineering and Technology (IJGET) Vol: 3 Issue 2 March , pp 27-32
- b. Asha John 2014.AUTOMATION OF NITROGEN PLANT USING PSA TECHNOLOGY. International Journal of Engineering Research & Technology Vol:3 Issue 2 .

xix. Mr. Rijo P C (Asst. Professor)

- a. Rijo P.C, I.Flavia Princess Nesamani ;GeethanjaliRaveendran; Lakshmi Prabha.v,2013.PERFORMANCE ANALYSIS OF DOUBLE AND TRIPLE GATE FINFET AT 30NM. Proceedings of international conference Nano Electronics and Nano Devices (ICNEND'13) organized by Saveetha School of Engineering, SaveethaUniversity on January,21-22.
- b. Rijo P.C, I.Flavia Princess Nesamani ;GeethanjaliRaveendran; Lakshmi Prabha.v2013.PERFORMANCE ANALYSIS OF FINFET USING VARIOUS GATE DIELECTRICS. Proceedings of International Conference on Circuits, Power and Computing Technologies (ICCPCT) organized by Noorul Islam Univeristy, Nagercoil on March 21-22.
- c. Rijo.P.C ,I.Flavia Princess Nesamani 2013.PERFORMANCE ANALYSIS OF FINFET DEVICE AT 60NM. International Journal of Engineering Trends and Technology-Vol:4 Issue-3.

Students Project details:

i) Project Title:Finger print based gender identification

ABSTRACT: The field of biometrics is tremendously gaining acceptance nowadays. Gender is a significant demographic attribute that can classify individuals. There are various biometric traits that have been used to classify gender. But no individual trait can provide much accuracy. Hence in this project fusion of two biometric traits viz., iris and fingerprint is done to classify gender. Mean and standard deviation are the features extracted from iris image. Ridge Thickness to Valley Thickness Ratio (RTVTR) is extracted from fingerprint images. A suitable feature vector is generated by training the neural network. The so formed feature vector is used for classifying gender..MATLAB is the software used and the GUI is used for interfacing. An accuracy of 75.23% is achieved.

Project Members :

JYAKEEC009 Mr Antony Jacob
JYAKEEC032, Ms Mariya Tony,
JYAKEEC037, Ms Nimpha Anto,
JYAKEEC041, Mr Renil T Vincent,
JYAKEEC 053 Ms Sneha Jose

ii) Project Title: Advanced License Plate Recognition System For Car Parking Members

ABSTRACT: The project consists of two sections: Radio frequency Identification (RFID) based reserved car parking system and number plate recognition by using Open Computer Vision(CV). The system provide high security and there is no need for a guard. In this system only authorised vehicles are permitted to the parking area by checking some conditions. Authorised vehicles have a valid RFID tag number and standardised license plate. RFID is an automatic identification method, relying on storing and remotely retrieving data using devices called RFID tags or transponders. RFID is a general term for small wireless devices that emit unique identifiers upon interrogation by RFID readers. The technology requires some extent of cooperation of an RFID reader and an RFID tag. The number in license plate is recognised by using open CV. Open CV is a library of programming functions for real time computer vision. The library has more than five hundred optimized algorithms and the library is mainly written in C. Reserved car parking system offer convenience for vehicle users and efficient usage of space. This system save time, space and make the parking more easy. It is a better alternative to the existing systems, even though there are known restrictions.

Project Members :

JYAKEEC008 Ansy Anto
JYAKEEC010 Anumary M V
JYAKEEC011 Daine Michael
JYAKEEC015 Fincy Jose
JYAKEEC028 Judith Sen E

iii) Project Title: Smart Home Using Android

ABSTRACT: Controlling the electric appliances is the essential technique in the home automation and wireless communication between the residence gateway and electric appliances is one of the most important parts in the home network system. The aim of this project is to reduce the electricity usage. Controlling different appliances using mobile increases the convinence and comfort. In this project, home automation and energy conservation are combined. Smart home using android is the used for home automation and energy conservation. In home automation different appliances are controlled using android phone. In energy conservation the energy meter reading is sent to the mobile phone. Thus can reduce the electricity usage if reading is found exceeding. An Android application will be designed giving user an interface to control the system such as switch the

appliances on-off and check electricity usage. The android smart phone is used for working of android application. ZigBee and data server are used for energy conservation and home automation.

Project Members:

JYAKEEC025 JinuThankachan

JYAKEEC039 Rahul Unnikrishnan

JYAKEEC040 Remya Ravi

JYAKEEC054 Sophia Sweezal Alphonso

JYAKEEC061 Vishnu Vijayakuma

iv) Project Title: SAFETY AUTO BRAKE SYSTEM USING MEMS SENSOR

The aim of the project is to design and construct a module used for vehicles in the hill stations. Auto braking system is used when vehicle is moving up ward direction. Due to this backward motion of vehicle, many accidents are reporting day to day. So the aim is to construct a module so that it can be applied to the vehicle to overcome the problem of backward motion while moving up the hill. MEMS sensor is interfaced to micro controller, microcontroller receives the data from the mems sensor and this activates the motor. This engages the ratchet-pawl assembly resisting backward movement. The project is made user friendly by the inclusion of LCD. This project is valuable in the sense, it can reduce the accidents reported day by day.

Project Members:

JYAKEEC018 GIFIN PAUL

JYAKEEC024 JIBIN V JOSE

JYAKEEC035 NAVEEN PHILIP

JYAKEEC051 SIJAN THOMAS

23. Details of patents and income generated: Nil

24. Areas of consultancy and income generated :Nil

25. Faculty selected nationally / internationally to visit other laboratories / institutions / industries in India and abroad :Nil

a. 26. Faculty serving in a) National committees b) International committees c) Editorial Boards d) any other (please National committees)

a. Indian Society for Technical Education (ISTE)

- | | | |
|-------------------------|------------------------|------------------------|
| 1. Dr. Jose P Therattil | 9. Ms. Nishamary P | 17. Mr. Jobin Varghese |
| 2. Ms. Shiny M I | 10. Ms. Anjitha V | 18. Mr. Rijo P C |
| 3. Mr. Dipinkrishnan R | 11. Ms. Ambily Francis | 19. Mr. Vivek Lukose |
| 4. Ms. Sindhu S | 12. Ms. Roshni Roges | 20. Ms. Nyni K A |
| 5. Mr. Jinesh K J | 13. Ms. Asha John | 21. Mr. Ponmani Raja |
| 6. Mr. Abraham P A | 14. Ms. Shainu Paulose | 22. Mr. Kapildas K S |
| 7. Mr. Abin Johns Raju | 15. Ms. Drisya M K | 23. Ms. Roshni Rajan |
| 8. Ms. Bindhu K Rajan | 16. Ms. Alice K Paul | Ms. Neethu Rose Thomas |

a. Institute of Engineers-India (IE-I)

Mr. Abin Johns Raju

b. International Committees

Institute of Electrical and Electronics Engineers (IEEE)

Mr. Jinesh K Jose

27. Faculty recharging strategies (UGC, ASC, Refresher / orientation programs, workshops, training programs and similar programs).

The following are the details of FDP/Seminar/Conferences attended by the faculty

Sl No	Name Of Staff	Fdp Title	Venue	Duration(Days)
1	Dr.Jose P Therattil	STP On Power System Control Using Power Electronics	Jecc	6
2	Dr.Jose P Therattil	Workshop On Functioning Possibility For Technical Education & Research	Nss Palakad	6
3	Dr.Jose P Therattil	2 Day Residential Programme For Professional Excellence	Csr Pariyaram	2
4	Dr.Jose P Therattil	Intellectual Property Rights & Research Funding Possibilities	Jyothi Engineering College	3
5	Dr.Jose P Therattil	Empowering Through Team Work	Jecc	7
6	Vivek Lukose	Intellectual Property Rights & Research Funding Possibilities	Jyothi Engineering College	2
7	Vivek Lukose	Concepts Coaching	Jyothi Engineering College	3
8	Alice .K .Paul	Intellectual Property Rights & Research Funding Possibilities	Jyothi Engineering College	2
9	Alice .K .Paul	2 Day Residential Programme For Professional Excellence	Csr Pariyaram	2
10	Alice .K .Paul	Empowering Through Team Work	Jecc	7
11	Shiny M.I	Hands On Training On FPGA Based Embedded	Gec Thrissur	5
12	Shiny M.I	System Design IC Design Flow	Sreepathy Institute Of Management And Technology	2
13	Shiny M.I	FDP On Design Testing & Launching Of Satellite Systems	Jecc	3

14	Shiny M.I	2 Day Residential Programme For Professional Excellence	Csr Pariyaram	2
15	Shiny M.I	Intellectual Property Rights & Research Funding Possibilities	Jyothi Engineering College	2
16	Shiny M.I	Empowering Through Team Work	Jecc	7
17	Drisy M K	CONCEPTS COACHING	Jyothi Engineering College	3
18	Drisy M K	Intellectual Property Rights & Research Funding Possibilities	Jyothi Engineering College	2
19	Drisy M K	FDP On Design Testing & Launching Of Satellite Systems	Jyothi Engineering College	3
20	Nyni K. A.	CONCEPTS COACHING	Jyothi Engg. College	3
21	Nyni K. A.	Intellectual Property Rights & Research Funding Possibilities	Jyothi Engg. College	2
22	Nyni K. A.	FDP On Design Testing & Launching Of Satellite Systems	Jyothi Engineering College	3
23	Nyni K. A.	Empowering Through Team Work	Jecc	7
24	Ponmani Raja M	EEE Early Career Faculty Development Program	Mes College Of Engineering ,Kuttipuram	5
25	Ponmani Raja M	STP On Power System Control Using Power Electronics	Jecc	6
26	Ponmani Raja M	RF Circuits Systems For Industrial Applications	Iit Kanpur	5
27	Ponmani Raja M	Intellectual Property Rights & Research Funding Possibilities	Jyothi Engineering College	2
28	Ponmani Raja M	FDP On Design Testing & Launching Of Satellite Systems	Jyothi Engineering College	3
29	Ponmani Raja M	2 Day Residential Programme For Professional Excellence	Csr Pariyaram	2
30	Ponmani Raja M	Empowering Through Team Work	Jecc	7
31	Dipinkrishnan R	FDP On Design Testing & Launching Of Satellite	Jecc	3

		Systems		
32	Dipinkrishnan R	2 Day Residential Programme For Professional Excellence	Csr Pariyaram	2
33	Dipinkrishnan R	Estimation & Coding For Multimedia Processing	Nit Calicut	735812
34	Dipinkrishnan R	Intellectual Property Rights & Research Funding Possibilities	Jyothi Engineering College	2
35	Dipinkrishnan R	Empowering Through Team Work	Jecc	7
36	Kapildas K.S	Intellectual Property Rights & Research Funding Possibilities	Jyothi Engineering College	2
37	Kapildas K.S	2 Day Residential Programme For Professional Excellence	Csr Pariyaram	2
38	Kapildas K.S	FDP On Design Testing & Launching Of Satellite Systems	Jyothi Engineering College	3
39	Kapildas K.S	Empowering Through Team Work	Jecc	7
40	Shainu Paulose	Intellectual Property Rights & Research Funding Possibilities	Jyothi Engineering College	2
41	Shainu Paulose	2 Day Residential Programme For Professional Excellence	Csr Pariyaram	2
42	Shainu Paulose	FDP On Design Testing & Launching Of Satellite Systems	Jyothi Engineering College	3
43	Sindhu S	FDP On Design Testing & Launching Of Satellite Systems	Jecc	3
44	Sindhu S	2 Day Residential Programme For Professional Excellence	Csr Pariyaram	2
45	Sindhu S	Intellectual Property Rights & Research Funding Possibilities	Jyothi Engineering College	2
46	Sindhu S	Empowering Through Team Work	Jecc	7
47	Ambily Francis	Design Testing And Launching Of Satellite System	Jecc	3
48	Ambily Francis	Intellectual Property Rights & Research Funding Possibilities	Jyothi Engineering College	2

49	Ambily Francis	Concepts Coaching	Jyothi Engineering College	3
50	Ambily Francis	Empowering Through Team Work	Jecc	7
51	Jobin Varghese	Intellectual Property Rights & Research Funding Possibilities	Jyothi Engineering College	2
52	Jobin Varghese	Empowering Through Team Work	Jecc	7
53	Jinesh K J	Train the trainer workshop on mobile application development using android	Lourdes Matha College Of Science And Technology, Trivandrum	3
54	Jinesh K J	FDP On Design Testing & Launching of Satellite Systems	Jecc	3
55	Jinesh K J	2 Day Residential Programme for Professional Excellence	Csr Pariyaram	2
56	Jinesh K J	Intellectual Property Rights & Research Funding Possibilities TIES	Jyothi Engineering College	2
57	Jinesh K J	Empowering Through Team Work	Jecc	7
58	Abraham P A	FDP On Design Testing & Launching of Satellite Systems	Jecc	3
59	Abraham P A	2 Day Residential Programme for Professional Excellence	Csr Pariyaram	2
60	Abraham P A	Intellectual Property Rights & Research Funding Possibilities	Jyothi Engineering College	2
61	Abraham P A	Empowering Through Team Work	Jecc	7
62	Abin Johns Raju	AICTE Sponsored FDP on Recent Trends And Dvelopements in microwave Engineering & Communication	Mec,Thrakkakara	14
63	Abin Johns Raju	IEEE Early Career Faculty Development Program	MES College Of Engineering ,Kuttipuram	5
64	Abin Johns Raju	Design Testing and Launching of Satellite Systems	Jyothi Engineering College	3

65	Abin Johns Raju	Recent Trends in RF and Microwave and Measurements	Iist Trivandrum	3
66	Abin Johns Raju	2 Day Residential Programme for Professional Excellence	Csr Pariyaram	2
67	Abin Johns Raju	Intellectual Property Rights & Research Funding Possibilities	Jyothi Engineering College	2
68	Abin Johns Raju	Empowering Through Team Work	Jecc	7
69	Roshni Rajan K	Intellectual Property Rights & Research Funding Possibilities	Jyothi Engineering College	2
70	Roshni Rajan K	FDP On Design Testing & Launching of Satellite Systems	Jyothi Engineering College	3
71	Roshni Rajan K	2 Day Residential Programme for Professional Excellence	Csr Pariyaram	2
72	Roshni Rajan K	Empowering Through Team Work	Jecc	7
73	Bindhu K Rajan	MATHEMATICS FOR SIGNAL PROCESSING	Gec Thrissur	5
74	Bindhu K Rajan	FDP On Design Testing & Launching of Satellite Systems	Jecc	3
75	Bindhu K Rajan	2 Day Residential Programme for Professional Excellence	Csr Pariyaram	2
76	Bindhu K Rajan	Intellectual Property Rights & Research Funding Possibilities	Jyothi Engineering College	2
77	Bindhu K Rajan	Empowering Through Team Work	Jecc	7
78	Nishamary.P	Short Term Course for Professional Development of faculties in Self financing Engineering Colleges	Ugc-Academic Staff College Uni Of College	3
79	Nishamary.P	Image processing & embedded system	College Of Engineering, Thalassery	2
80	Nishamary.P	Image processing & embedded system	College Of Engineering, Thalassery	2
81	Nishamary.P	FDP On Design Testing & Launching of Satellite Systems	Jecc	3
82	Nishamary.P	2 Day Residential Programme for Professional Excellence	Csr Pariyaram	2

83	Nishamary.P	Intellectual Property Rights & Research Funding Possibilities	Jyothi Engineering College	2
84	Roshni Roges	Intellectual Property Rights & Research Funding Possibilities	Jyothi Engineering College	2
85	Roshni Roges	2 Day Residential Programme for Professional Excellence	Csr Pariyaram	2
86	Roshni Roges	FDP On Design Testing & Launching of Satellite Systems	Jyothi Engineering College	3
87	Neethu Rose Thomas	Intellectual Property Rights & Research Funding Possibilities	Jyothi Engg. College	2
88	Neethu Rose Thomas	Short Term Course for Professional Development of faculties in Self financing Engineering Colleges	Ugc-Academic Staff College, Calicut University	3
89	Neethu Rose Thomas	FDP On Design Testing & Launching of Satellite Systems	Jyothi Engineering College	3
90	Neethu Rose Thomas	2 Day Residential Programme for Professional Excellence	Csr Pariyaram	2
91	Neethu Rose Thomas	Empowering Through Team Work	Jecc	7
92	Asha John	Intellectual Property Rights & Research Funding Possibilities	Jyothi Engineering College	2
93	Asha John	2 Day Residential Programme for Professional Excellence	Csr Pariyaram	2
94	Asha John	FDP On Design Testing & Launching of Satellite Systems	Jyothi Engineering College	3
95	Asha John	Empowering Through Team Work	Jecc	7
96	Anjitha V	FDP On Design Testing & Launching of Satellite Systems	Jecc	3
97	Anjitha V	2 Day Residential Programme for Professional Excellence	Csr Pariyaram	2

98	Anjitha V	Empowering Through Team Work	Jecc	7
99	Rijo P C	Custom ic design using tanner EDA	Gec Thrissur	2
100	Rijo P C	Intellectual Property Rights & Research Funding Possibilities	Jyothi Engineering College	2
101	Rijo P C	Empowering Through Team Work	Jecc	7

Guest Lectures

Guest lectures are arranged to plug the gap between Institute and Industry. This may transform and also help the staff to gather additional knowledge.

Module Description	Any other contributory institute/ industry	Developed /Organized by	Duration	Resource Person
Indian Space Programme		ECE	06-02-2013	Mr. S Gopakumar, Consultant C- DIT, Trivandrum, Dy. Director (Rtd) VSSC, Trivandrum, Kerala
GPS Systems		ECE	06-02-2013	Mr. Hemachandran S, Group Head CSNG, IISU, Trivandrum
Introduction to Inertial Navigation Systems		ECE	07-02-2013	Mr. R Praveen, Scientist/ Engineer SD, IISU , VSSC, Trivandrum
Satellite Power Systems		ECE	08-02-2013	Dr. Bibin John, Scientist/ Engineer SD, IISU , VSSC,
Special Electrical Machines for Spacecraft Applications		ECE	08-02-2013	Mr. V T Sadasivan Achari, Head,

Invited Talk on "Three things Every ECE Engineer should Know: Makers, Internet of Things & Big-		ECSA	8/21/2014	Mr Dilin Anand, Senior Asst. Editor, Electronics For You Magazine
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New facilities Created

9. Wi-Fi connection is enabled with the speed of 10 Mbps covering the whole campus.
10. Volumes of books has been increased to 920 in Department Library
11. Hostel students are facilitated with internet up to 7.30 pm and library up to 7 pm
12. A separate staff room for faculty has been allocated .

28. Student projects

percentage of students who have done in-house projects including interdepartmental projects

in-house :90%

inter departmental:10%

percentage of students doing projects in collaboration with other universities / industry / institute : Nil

29. Awards / recognitions received at the national and international level by

Faculty

Nil

Doctoral / post doctoral fellows

Nil

Students

Students Acheivements					
Sl No	Student Name/Class	Dates	Event	Institution	Prize /Participation
1	Jishnu T B	Mar-15	Kathakali Sangeetham	DZONE held at Dr John Mathai center Arunattukara	2 nd Prize
2	Aswathi Krishna	Mar-15	Recitation (malayalam)	DZONE held at Dr John Mathai center Arunattukara	A grade

3	Enson MP	Mar-15	Western group song	DZONE held at Dr John Mathai center Arunattukara	A grade
4	Desmin Dennis	Mar-15	Western group song	DZONE held at Dr John Mathai center Arunattukara	A grade
5	Gopika Unnikrishnan	Mar-15	Western group song	DZONE held at Dr John Mathai center Arunattukara	A grade
6	Anitha P	Mar-15	Mohoniyattam	DZONE held at Dr John Mathai center Arunattukara	A grade
7	Aswathi Anil	Mar-15	Monoact	DZONE held at Dr John Mathai center Arunattukara	A grade
8	Gopika Unnikrishnan	Mar-15	Light Music	DZONE held at Dr John Mathai center Arunattukara	A grade
9	Gopika Unnikrishnan	Mar-15	Patriotic song	DZONE held at Dr John Mathai center Arunattukara	3 rd A grade
10	Desmin Dennis	Mar-15	Patriotic song	DZONE held at Dr John Mathai center Arunattukara	3 rd A grade
11	Aiswaraya v	Mar-15	Group dance	DZONE held at Dr John Mathai center Arunattukara	A grade
12	Anna Joby Manjila, Jisna Shajaan, Liya Varghese, Melinda Sunny, Niya M S	Feb-15	Eye Cntrled Wheel Chair Using Raspberry Pi With home automation	Exhibited in Yuva Master Mind Exhibition Organized by Malayala manorama	Participated
13	Ms Nivya George	Oct-14	IEEE International Conference	Reya Institute of technology	Presented and Published

14	Mr Vishnu K and Team	Oct-14	Robotryst 14	IIT Delhi	Selected to Next Round
15	Bobby jose	Oct-14	EXPO	Part of Nirmaam. Techno cultural Symposium organized by Division of Civil Engineering ,School of Engineering CUSAT	First Prize
16	Mr Sebastian Joseph ,Mr Abin Anto	Sep-14	Circuit Debugging	NSS college of Engineering ,Palakkad	2nd prize
17	Mr. John Paul V & Mr. Razil Ahmed F A	Aug-14	Start up2020	NASSCOM-India in Association with Thrissur Development Authority and Entrepreneurship Development Cell, Government Engineering College, Thrissur	Participated
18	Mr. Geo Papachan, Mr. Joe Abraham and Ms. Sneha Pauly	Aug-14	IEEE SAC Sponsored Workshop on “Star Innovator”	Reva Institute of technology	Selected to next Round
19	Ms. Rosemary John, Ms. Ancy Devassy, Mr. Alwyn Antony, Mr. Joe Neelankavil, Ms. Finky Francis	Jul-14	IEEE International Conference	Amrita Institute of Science and Technology	Presented
20	Ms. Judith Sen, Ms. Fincy Jose, Ms. Ancy Anto, Ms. Anumary M V, Ms. Daine	Jul-14	IEEE International Conference	Amrita Institute of Science and Technology	Presented

	Michael				
21	Ms. Anphy Jose, Ms. Deepa Merlin Dixon, Ms. Naiji Joseph & Ms. Silpa George E	Jul-14	IEEE International Conference	Amrita Institute of Science and Technology	Presented
22	7 students of ECE	Jun-14	Verilog Programming	Viswajyothi Engineering College	Participated
23	Ms. Kavya Caroline	Apr-14	Debate competition	Natura Environmental Forum of Jyothi Engineering College	2nd Prize
24	Anagha Xavier	Mar-14	ISTE Sponsored Two Day Work shop on Matalab/simulink Application to Electrical Engineering	JECC	Participated
25	Anugraha Paul	Mar-14	ISTE Sponsored Two Day Work shop on Matalab/simulink Application to Electrical Engineering	JECC	Participated
26	Neenu Paul	Mar-14	ISTE Sponsored Two Day Work shop on Matalab/simulink Application to Electrical Engineering	JECC	Participated

27	Pooja Varma K M	Mar-14	ISTE Sponsored Two Day Workshop on Matalab/simulink Application to Electrical Engineering	JECC	Participated
28	Sebastian Joseph, Abin Anto,	Mar-14	Techno Teacher	Conducted as a part of Vyvidh 14 Vidya Academy of Science and Technology	Participation
29	Mr. Janwin Sunny, Mr. Lidwin Cleetus, Mr. Antony Jacob & Mr. George Sunny	Feb-14	Tricky Tech	PALMARIUS'14, Sahrdya Engineering College	1st Prize
30	Ashik K V, Alesha santhosh, Anugraha Paul	Feb-14	Circuit Zinga, Tricky Tech, Merchadry	Palmarius 14 Organized by sahrdaya college of engineering technology Kodakara	Participation
31	Sebastain joseph, Nithararada Krishnan, Abin anto k	Feb-14	Circuit Zinga (finalist)	Palmarius 14 Organized by sahrdaya college of engineering technology Kodakara	Participation
32	Ms. Nimpha Anto and Ms. Sneha Jose	Jan-14	Paper presentation	Lanista '14 at Royal College of Engineering & Technology, Akkikavu	Ist Prize
33	Ms Maneesha and Ms Amnya Elizabeth Chandy	Jan-14	Circuit Debugging	Tharang 14, Jyothi Engineering College	Participated
34	Mr Abin Anto, Ms Alesha	Jan-14	Circuit	Tharang 14, Jyothi Engineering	Participated

	Santhosh		Debugging	College	
35	Ms Anupama K ,Ms Anusha K B	Jan-14	Circuit Debugging	Tharang 14,Jyothi Engineering College	Participated
36	Ms Pooja Varma K M ,Ms Nithara Radhakrishnan	Jan-14	Circuit Debugging	Tharang 14,Jyothi Engineering College	Participated
37	Ms Nivya George	Jan-14	Paper Presentation	Tharang 14,Jyothi Engineering College	Participated
38	Ms. Rosemary John, Ms. Ancy Devassy, Mr. Alwyn Antony, Mr. Joe Neelankavil, Ms. Finky Francis	Jan-14	Paper Presentation	Tharang 14,Jyothi Engineering College	Participated
39	Ms. Ann Marie Antony and Ms. Rose Mary John	Jan-14	Paper presentation	Lanista '14 at Royal College of Engineering & Technology, Akkikavu	2nd Prize
40	Ms. Judith Sen, Ms. Fincy Jose, Ms. Ancy Anto, Ms. Anumary M V, Ms. Daine Michael	Jan-14	Paper Presentation	Tharang 14,Jyothi Engineering College	Participated
41	Mr Antony Jacob , Ms Mariya Tony ,Ms Nimpha Anto, Mr Renil T Vincent,Ms Sneha Jose	Jan-14	Yuva Master Mind ,Manorama	Yuva Master Mind ,Manorama and IBS ,Ernakulam,Kerala	Finalist
42	Ms Anjali Geo ,Ms Ann Mary Antony ,Mr Janwin Sunny, Mr George Sunny,Ms	Jan-14	Yuva Master Mind ,Manorama	Yuva Master Mind ,Manorama and IBS ,Ernakulam,Kerala	Finalist

	Ronat Alice Cheriyan				
43	Mr. Antony Jacob, Ms. Nivia George and Ms. Maria Tony	Jan-14	Circuit Debugging	Tharang 14,Jyothi Engineering College	2nd Prize
44	Ms Lakshmi ,Ms Theresa Jones	Dec-13	IEEE International Conference	Sree Easwar College of Engineering,Coimb athore	Presented and Published
45	Ms Tilty Tony,Ms Lakshmi S	Dec-13	IEEE International Conference	Sree Easwar College of Engineering,Coimb athore	Presented and Published
46	Christina Francis	Oct-13	One Day Pre departure orientation Programm for overseas job	NORKA ROOS	participation
47	Naveen Philip	Sep-13	Verbal Reasoning	Placement Ready Competition Coducted by btechghuru.com	Merit certificate
48	Jan Win Sunny	Sep-13	Placement Ready competition Aptitude &Resoning	Coducted by btecguru.com	Second Prize
49	Jinu Thankachan,Umesh Unni	Sep-13	Hurt Locker	DYUTHI 13, National Level Muti Fest Held at GEC ,TCR	Second Prize
50	Umesh unni	Sep-13	Hurt locker	DYUTHI 13 National level Multi fest Held at GEC TCR	Second prize
51	Alesha Santhosh	Sep-13	Dungeons of DYUTHI Go	DYUTHI 13 National level	Participation

			Simple Treasure Hunt Hurt Locker Electropoly	Multi fest Held at GEC TCR	
52	Sherin Thomas	Aug-13	Web Development	Workshop held at Satvika, IEEE Kochi Hub WIE Congress held at College of Engineering Chengannur	Participation
53	Shaheer Shan	Aug-13	Intensive training session on PIC microcontroller workshop held at satvika, IEEE Kochi Hub WIE Congress	held at college of engineering Chengannur	Participation
54	Shyamlal V S	Aug-13	Intensive training session on User Experience workshop held at satvika, IEEE Kochi Hub WIE Congress	held at college of engineering Chengannur	Participation
55	Umesh Unni	Aug-13	Intensive training session on User Experience workshop held at satvika, IEEE Kochi Hub WIE Congress	held at college of engineering Chengannur	Participation
56	Sherin Thomas	Aug-13	Intensive training session on Web Development workshop held at satvika, IEEE Kochi Hub WIE Congress	held at college of engineering Chengannur	Participation

57	Mathew J Kodenkandath	Aug-13	Intensive training session on User Experience workshop held at satvika, IEEE Kochi Hub WIE Congress	held at college of engineering Chengannur	Participation
58	Mr. Shaheer Shan	Mar-13	Matlabber	Royal College of Engineering & Technology Campus, Thrissur.	1st Prize
59	Ms. Tracy Jose	Mar-13	Paper Presentation	South Indian IT Fest organized by the Institute of Management & Technology, Pottor, Thrissur,	1st Prize
60	Amrutha Wilson & Sherin Thomas	Mar-13	paper on Kerala towards a Smarter grid	National Level Tech Fest BRAHMAVEGA 13 conducted by RCET Tcr	Paper presentation
61	Niviya Geroge, Nimpha Anto	Mar-13	Paper on Wireless Cardiac Pressure Monitor Using MEMS	National Level Tech Fest BRAHMAVEGA 13 conducted by RCET Tcr	Paper presentation
62	Juliet Joju M, Jannya Jayan	Mar-13	Paper on Space Based Solar Power	National Level Tech Fest BRAHMAVEGA 13 conducted by RCET Tcr	Paper presentation
63	Neshma A N	Mar-13	paper on RED TRACTON HUMAN AREA NETWORK	National Level Tech Fest BRAHMAVEGA 13 conducted by RCET Tcr	Paper presentation
64	Sherin Thomas	Mar-13	paper on JUIST	National Level Tech Fest BRAHMAVEGA	Paper presentation

				13 conducted by RCET Tr	
65	George Sunny, Shyam Lal V S,Rahul unnikrishanan,Awin Antony Vargheese,roshin C Jackson,	Mar-13	KAIZEN IEEE kochi HUB meet	College of Engineering Munnar	Participation
66	Mr. Umesh Unni P	Feb-13	Paper Presentation	KSEB Engineers Association with the support of IEEE Power & Energy Society Kerala	Presented
67	Mr. Jinu K Thankachan S7 ECE , Mr. Leo Paul , Mr. Mathew J Kodenkandath(s5 ECE)	Feb-13	Microsoft Tech Days	Microsoft at St. Joseph College of Engineering & Technology, Pala.	Participation
68	Umesh unni	Feb-13	EasternPercusion	Brahma 13 techno Cultural Fest At ASIET, Kalady	Participated
69	Mr. Razil Ahmed F A	Jan-13	Two Day Workshop	CCDU (Community & Capacity Development Unit),Govt. of Rajasthan	Participation
70	Mr. Umesh Unni P	Jan-13	Paper Presentation('Lakshya 2013')	Govt. Engineering College, Kozhikode.	Presented
71	Lidwin Cleteus	Jan-13	Paper presentation	Techno Fest LAKSHYA 13 Conducted at GEC Kozhikode	Participation

72	Mr Naveen G	Dec-12	University Results	Calicut University	1st Rank
73	Ms Anjali C K	Dec-12	University Results	Calicut University	5th Rank
74	Mr. Roni Jose George (S7, ECE), Mr. Umesh Unni P (S5, ECE)	Sep-12	Implant Training	ITI Palghad	Participation
75	Mr. Anoop Francis (S5), Mr. Jinu Thankachan (S5), Mr. Jones J Alapat (S7), Mr. Rahul Unnikrishnan (S5), Mr. Roni Jose George (S7), Ms. Abina Menachery (S7), Ms. Jinu Jose (S7), Ms. Mahima Cherian (S7), Ms. Nisha Menon (S7), Ms. Nivia George (S5), Ms. Tilty Tony (S7), Ms. Tracy Jose (S5)	June-12	KITeS (Kerala IEEE Technical Symposium)	June 2012 at Mar Baselious College of Engineering & Technology, Trivandrum	Participation
76	Mr. Naveen G (S8 ECE)	Mar-12	Paper Presentation	Malabar College Of Engineering	1st Prize
77	Ms. Marymol Jose (S8 ECE)	Mar-12	Paper Presentation	Malabar College Of Engineering	2nd Prize

78	Mr. Charles Andrews (S8 ECE)	Mar-12	Paper Presentation	Malabar College Of Engineering	3rd Prize
79	Jishnu R	Mar-12	Paper presentation Paper on Witricity	At MCET	Participation
80	Mr. Charles Andrews	Jan-12	Paper Presentation	PALMARIOUS 12 ,Sahradaya College of Technology and Science	1st Prize
81	Mr. Charles Andrews	Jan-12	Personality Freak Out	PALMARIOUS 12 ,Sahradaya College of Technology and Science	1st Prize
82	Mr. Charles Andrews(S8 ECE)	Jan-12	Best Technical crew	PALMARIOUS 12 ,Sahradaya College of Technology and Science	1st Prize
83	Mr. Jones J Alappat (S6 ECE)	Jan-12	Gaming Contest	PALMARIOUS 12 ,Sahradaya College of Technology and Science	1st Prize
84	Mr.Jithin Justice Raphy (S6 ECE)	Jan-12	Gaming Contest	PALMARIOUS 12 ,Sahradaya College of Technology and Science	2nd Prize
85	Mr. Charles Andrews,Mr. Jithin Jose M & Mr. Justin Johnson (S8 ECE)	Jan-12	Circuit Debugging	PALMARIOUS 12 ,Sahradaya College of Technology and Science	2nd Prize
86	Sruthy M	Jan-12	Eloution (sanskrit)	D-ZONE ARTS FEST 2012,GOVT Eng College Tcr	First

87	Sruthy M	Jan-12	Essay writing (Sanskrit)	D-ZONE ARTS FEST 2012, GOVT Eng College Tcr	Second
88	Charles Andrews ,Prince K P (S7 ECE)	Dec-11	Paper Presentation in IEEE Paper Presentation Contest	IEEE SB	Best Paper
89	Naveen G (S7 ECE)	Dec-11	Paper Presentation in IEEE Paper Presentation Contest	IEEE SB	Best Paper
90	Grace Aloysius , Mancy K Mathew S7 ECE	Dec-11	Paper Presentation in IEEE Paper Presentation Contest	IEEE SB	Best Paper
91	Mr. Charles Andrews	Dec-11	Paper Presentation	22ND Regional Student Convention of CSI – Vidya Academy of Science & Technology (VAST)	1st Prize
92	Mr. Charles Andrews , Mr. Jithin Jose M	Dec-11	Quiz Competition	22ND Regional Student Convention of CSI – Vidya Academy of Science & Technology (VAST)	2nd Prize
93	Ms. Vidya P	Dec-11	University Results	Calicut University	1st Rank
94	Mr. Charles Andrews	Dec-11	Paper Presentation	22ND Regional Student Convention of CSI – Vidya Academy of Science &	1st Prize

				Technology (VAST)	
95	SruthyM	Dec-11	Eloution (sanskrit)	D-zone arts fest 2010-11, Govt Law College Tcr Panampilly Memmorial Govt Ccollege Chalakydy	First Prize
96	Sruthy M	Dec-11	Essay Writing (Sanskrit)	-zone arts fest 2010-11, Govt Law College Tcr Panampilly Memmorial Govt Ccollege Chalakydy	Thrid Prize
97	Mr. Nithin George , Mr. Roni Jose George ,S5 ECE	Nov-11	Paper Presentation in All India Seminar	JECC ,Thrissur	Presented
98	Ms. Dony J Muttath ,S5 ECE	Nov-11	Best Student Member in ISTE	ISTE , Thrissur	Best Student
99	Angela Papachan,Jinu Jose K	Oct-11	Quiz competition	At JECC in association with CESA	Participation
100	Mr Naveen G	Sep-11	Merit Award for Securing 1st Position	Architect & Engineers Association	Merit Award
101	Mr Tom Vargheese K S8 ECE	Jul-11	Technical Article	EFY Magazine	Published

102	Minna Nelson, Jerin Jose A, Jojo Jose J, Mancy K Mathew, Grace Aloysius, Aiswarya Dileep, Nisha Anand, Anagha P, Deepthi M Nair, Magnet Rose Mathew, Ajay Raj V, Rijo K R, Sebin George, Rosemol Davis K, Varun Jacob, Nikhil Vincent Anjali C K, Monica Davis C, Sruthy M, Monisha Simon, Rinta Vijayan E, Prince K P, Lmcy Cheriyann, Rini Eivis M,	Jul-11	Poject Expo	CASTALIA '11 Organized By VAST student chapter of(IEI)	Participation
103	Jerin Jose, Jojo Jose, Ajayraj V	Jul-11	CASENO	CASTALIA '11 Organized By VAST student chapter of(IEI)	First Prize
104	Anagha P, Charles Andrews	Jul-11	CASENO	CASTALIA '11 Organized By VAST student chapter of(IEI)	Participation
105	Rijo K R, Sebin George, Varun Jacob,	Jul-11	CASENO	CASTALIA '11 Organized By VAST student chapter of(IEI)	Third prize
106	Sruthy M	Feb-11	Eloution (sanskrit)	D-ZONE ARTS FEST 2010-2011	Second
107	Sruthy M	Feb-10	Eloution	D-ZONE ARTS	Second

			(sanskrit)	FEST 2009-2010	
108	Sruthy M	Oct-09	Eloution (sanskrit)	D-ZONE ARTS FEST 2009, IES college of Engineering Chittilappily TCR	First

30. Seminars/ Conferences/Workshops organized and the source of funding (national / international) with details of outstanding participants, if any.

SL. No.	Date	Event Type	Title	Organized by	Sponsored by	Funding Amount	in Association with	Duration in Days
1	28-11-2008	Workshop	Workshop on Embedded Systems	Dept. of ECE JECC	JECC		-	2
2	03-08-2009	Faculty Development Program	FDP on VLSI & Embedded Systems	Dept. of ECE JECC	AICTE	100000	-	10
3	26-11-2010	Workshop	Workshop on Signal Processing	Dept. of ECE JECC	JECC		ISTE Chapter, JECC	2
4	15-12-2011	Faculty Development Program	FDP on Very Large Scale Integration (VLSI)	Dept. of ECE JECC	JECC		ISTE Chapter, JECC	3
5	06-02-2013	Faculty Development Program	FDP on Design Testing & Launching of Satellite Systems	Depts. of AEI, ECE & EEE, JECC	JECC	10000	ISTE Chapter, JECC	3
6	06-02-2013	Workshop	Workshop on Latex	Depts. of ECE	JECC		ECISA (Students's Association)	1

SL. No.	Date	Event Type	Title	Organized by	Sponsored by	Funding Amount	in Association with	Duration in Days
7	15-07-2013	Technical Talk	Fundamentals of Digital Image Processing	Depts. of ECE	JECC		ECSA (Students's Association)	1
8	27-07-2013	Workshop	Soft Skills	Dept of ECE	JECC		ECSA (Students's Association)	1
9	24-02-2014	Workshop	PCB Design & Fabrication	Dept. of ECE	JECC		ECSA (Students's Association)	1
10	21-02-2014	Workshop	PCB Fabrication	Dept. of ECE	ISTE		ECSA (Students's Association)	1
12	21-08-2014	Technical Talk	Three things Every ECE Engineer should Know: Makers, Internet of Things & Big-Data	Dept. of ECE	JECC		ECSA (Students's Association)	1
13	16-10-2014	Workshop	ROBINO – Robotics workshop using Arduino	Dept. of ECE	ISTE		ECSA (Students's Association)	2
14	15-01-2015	Workshop	Intellectual Property Rights and Research Funding Possibilities'	Dept. of Electronics & Communication Engineering	KSCSTE	50000	PIC-Kerala / KSCSTE	3

31. Code of ethics for research followed by the departments

As per the University guidelines

32. Student profile programme-wise: Name of the Applications Selected Pass percentage Programme received Male Female Male Female (refer to question no. 4)

Name of the Course/programme (refer question no. 4)	Applications received	Selected	Enrolled		Pass Percentage
			*M	*F	
B.TECH(ECE) 2008-2012	145	60	25	35	98%
B.TECH(ECE) 2009-2013	126	60	15	45	93%
B.TECH(ECE) 2010-2014	133	61	22	39	95%
2011-2015	113	61	17	44	NA

*M = Male *F = Female

33. Diversity of students

Name of the Course	% of students from the same state	% of students from other States	% of students from abroad
B.TECH (ECE) 2010-2014	100%	NA	NA
B.TECH (ECE) 2011-2015	100%	NA	NA
B.TECH (ECE) 2012-2016	100%	NA	NA

34. How many students have cleared Civil Services and Defense Services examinations, NET, SET, GATE and other competitive examinations? Give details category-wise.

Sl. No.	Name of the competitive Examination	Number of students Cleared
1	GATE	8

**35. Student progression Student progression Percentage against enrolled UG to PG,
PG to M.Phil. PG to Ph.D., Ph.D. to Post-Doctoral**

Employed Campus selection □

Other than campus recruitment

Entrepreneurs

Student progression		Against % enrolled
UG to PG		13%
PG to M.Phil.		N.A
PG to Ph.D.		N.A
Ph.D. to Post-Doctoral		N.A
Employed	Campus selection	35%
	Other than campus recruitment	10%
Entrepreneurship/Self-employment		-

36. Diversity of staff Percentage of faculty who are graduates of the same university from other universities within the State from universities from other States from universities outside the country

Course	Degree	PG
No. of Faculty from same university (Kerala/Amrita/Anna/ Karunnya	11	0
No. of Faculty from Other university	11	22
No. of Faculty from university within the state	5	3
No. of Faculty from university from other state	6	19

37. Number of faculty who were awarded M.Phil., Ph.D., D.Sc. and D.Litt. during the assessment period : 1

38. Present details of departmental infrastructural facilities with regard to a) Library b) Internet facilities for staff and students c) Total number of class rooms NAAC for Quality and Excellence in Higher Education 99 Manual for Self-study Universities d) Class rooms with ICT facility e) Students' laboratories f) Research laboratories

a. Department Library:

Sl. No.	Facility	Description
1	Month and Year of Establishment	June, 2006
2	Library area(L x B)	22 × 18.5 sq.ft
3	Furniture available	16 Chairs 8 Tables, 10 Bookshelves, 1 Computer table
4	No. of books available	
	a) Purchased	170
	b) Complimentary	-
	c) Others	-
	d) Competitive Exams Guides	20
	e) Databooks	85
	f) Lab Manuals	28
	g) Total	805
5	No. of Journals/ Magazines	
	a) Subscribed	1 (EFY Magazine)
	b) Complimentary	-
	c) Others	-
	d) Total	210(Magazines), 5(Journals)
6	CDs (Digital Media)	72
9	No. of Project Reports	402
10	No. of Seminar Reports	853

b. Internet facilities for Staff & Students:

- Speed: 16 Mbps Broadband
- 24×7 WiFi Access

c. Class rooms with ICT facility:

Room Description	Usage	Shared / Exclusive	Capacity	Rooms Equipped with
Class room EAB 304	Class room for II year A batch students	Exclusive	95.2 sq.mts	Black board, OHP projector, Provision for LCD, 8 fans, 6 Tubelights, 24 benches, faculty table and chair, 20 large windows, 12 small windows
Class room EAB 204	Class room for II year B batch students	Exclusive	95.2 sq.mts	Black board, OHP projector, Provision for LCD, 5 fans, 6 Tubelights, 23 benches, faculty table and chair, 20 large windows, 20 small windows
Class room EAB 203	Class room for III year students	Exclusive	95.2 sq.mts	Black board, OHP projector, LCD projector, 5 fans, 6 Tubelights, 23 benches, faculty table and chair, 20 large windows, 20 small windows
Class room EAB 205	Class room for IV year students	Exclusive	95.2 sq.mts	Black board, OHP projector, LCD projector, 5 fans, 6 Tubelights, 23 benches, faculty table and chair, 20 large windows, 20 small windows
Class room ADM 306	Class room for I year A batch students	Exclusive	70.2 sq.mts	Black board, OHP projector, Provision for LCD, 6 fans, 6 Tube lights, 22 benches, faculty table and chair, 15 large windows, 15 small windows
Class room ADM 307	Class room for I year B batch students	Exclusive	70.2 sq.mts	Black board, OHP projector, Provision for LCD, 6 fans, 6 Tube lights,

				22 benches, faculty table and chair, 15 large windows, 15 small windows
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d. Class rooms with ICT facility

e. Students' laboratories & Research laboratories:

Sl No.	Laboratory description	Exclusive use/ Shared use	Space(Sq.mts)
1	VLSI Lab(EAB 213)	Exclusive	122.4 sq.mts
2	Communication System Lab(EAB 210)	Exclusive	91.8 sq.mts
3	Microprocessor & Controller Lab EAB 212	Exclusive	91.8 sq.mts
4	Analog Communication Lab EAB 209	Exclusive	91.8 sq.mts
5	Digital Electronics Lab EAB 211	Exclusive	91.8 sq.mts
6	Mini Project EAB 314	Exclusive	122.4 sq.mts
7	Electronic Circuits Lab EAB 309	Exclusive	79.2 sq.mts
8	Linear Integrated Circuits Lab EAB 207	Exclusive	91.8 sq.mts
9	DC & DSP Lab EAB 306	Exclusive	91.8 sq.mts
10	R & D Lab EAB 307	Exclusive	91.8 sq.mts
11	Project EAB 211	Exclusive	91.8 sq.mts

39. List of doctoral, post-doctoral students and Research Associates a) from the host institution/university b) from other institutions/universities : Nil

40. Number of post graduate students getting financial assistance from the university.

Nil

41. Was any need assessment exercise undertaken before the development of new programme(s)? If so, highlight the methodology. :Nil

42. Does the department obtain feedback from

a. faculty on curriculum as well as teaching-learning-evaluation? If yes, how does the department utilize the feedback?

b. students on staff, curriculum and teaching-learning-evaluation and how does the department utilize the feedback?

c. alumni and employers on the programmes offered and how does the department utilize the feedback?

The students are asked to give unbiased and honest feedback. The process is transparent and does not disclose student identity.

The students evaluate the teachers in the following context:

- Engage lectures regularly on time
- Overall appearance and personal Communication Skills
- Explanation
- Use of supplementary methods
- Overall appearance and personal Communication Skills
- Explanation
- Use of supplementary methods
- Readiness to address student doubts
- Availability
- Use of black board
- Relationship with students

After collecting the online feedback from the students, the evaluation of the teacher is done by Quality Improvement Cell and teachers are evaluated based on the overall performance in the following categories:

Evaluation	Grade	Grade points
Excellent	A	5
Very Good	B	4
Good	C	3
Fair	D	2
Satisfactory	E	1

The complete report of all the Departments reaches Principal and the report of respective department is submitted to their respective Head of Department. The teachers with other grades introspect themselves and improve in the concerned areas.

A class committee meeting is conducted twice during each semester including the Head of Department, 6 students representing the class and the concerned faculties on each subject. The students and the faculties can raise their concern on various issues related academic and general matters.

Verbal feedback is collected from the students during lectures and practical hours and the same is discussed with concerned head and necessary corrective action is initiated. Head of Department discusses the feedback with the concerned faculty for improvement.

The feedback is collected two times, once at mid semester and also at the end of the semester. About 95% of students participate and it is done on-line.

Comments are considered positively. Weaknesses with regard to teaching are expected to be rectified by the faculty with the sole objective of maintaining good academic practices and standards.

Basis of reward/corrective measures, if any

Based on the feedback collected from the students on the faculty and the result analysis, the following reward /corrective measures are taken up in the Institute.

Rewards

Appreciation letter by the HOD for those who produce 100% results in University Examinations.

Corrective measures

- Counselling the faculty who scored less than 3.5 points on 5 – point scale
- Sponsoring for refresher courses to improve the subject knowledge
- Organizing workshops on teaching methodologies
- Arranging specialized lectures by eminent faculty
- Making available e-lectures sourced from internet

43. List the distinguished alumni of the department (maximum 10)

Sl No.	Name	Affiliation
1	Ms.Vidya	VSSC
2	Mr Dilin Anand,	Senior Asst. Editor, Electronics For You Magazine
3	Mr.Stegin	IBM
4	Mr.Arun Thomas Kochu	Design Engineer, Mercedes Benz
5	Mr. Joseph Lal	ISRO
6	Mr.Hari K	ISRO

7	Ms. Anagha P	Electronics For You Magazine
8	Mr.Dany Raj	State Bank of India
9	Mr.Rajesh	Dhanalakshmi Bank
10	Ms.Angila Pappachan	Federal Bank

44. Give details of student enrichment programmes (special lectures / workshops / seminar) involving external experts.

1) **ISTE- Indian Society for Technical Education** – ISTE Student chapter started the activities in the year 2012. The chapter had organized the following.

Year	Event	Associated with Professional Chapters/Industry	Date	Organized/ Resourse Persons
2014-2015	IPR – Tool to protect Inventions and Creations	PIC-KERALA & KSCSTE	16/1/2015	Shri. V.P. Balagangadharan Former Dr.Brahmaprakash Scientist, VSSC, Trivandrum
2014-2015	Patentability Criteria, Non patentable Inventions and Patent searching procedures	PIC-KERALA & KSCSTE	16/1/2015	Shri. Ajith. M Asst. Controller of Patents & Designs, Patent Office, Chennai
2014-2015	Patenting System in India, Patent filing procedures & Patent Drafting	PIC-KERALA & KSCSTE	16/1/2015	Shri. Ajith. M Asst. Controller of Patents & Designs, Patent Office, Chennai
2014-2015	Funding from KSCSTE for Research activities	PIC-KERALA & KSCSTE	17/1/2015	Dr. Ajit Prabhu V. Joint Director, KSCSTE & Nodal Officer, PIC-Kerala
2014-2015	Case Discussion &	PIC-KERALA &	17/1/2015	Shri. Ajith. M

	Practical Session on Patent Drafting	KSCSTE		Asst. Controller of Patents & Designs, Patent Office, Chennai
2014-2015	Support from PIC-Kerala for IPR protection	PIC-KERALA & KSCSTE	17/1/2015	Shr. Nigel Vincent Project Scientist, PIC-Kerala, KSCSTE
2014-2015	Robino 2014	ISTE	16/10/2014 -17/10/2014	Mr Jinesh K J AP, ECE
2014-2015	ROBOTRYST 2014	IEEE Student Chapter	10/10/2014 -11/10/2014	IIT DELHI
2014-2015	Invited Talk on "Three things Every ECE Engineer should Know: Makers, Internet of Things & Big-Data"	ECSA/ISTE	21/8/2014	Mr Dilin Anand, Senior Asst. Editor, Electronics For You Magazine
2014-2015	Introduction to VHDL	ECSA/ISTE	20/09/2014	Mr. Rijo P C, M.Tech, Asst. Prof ECE JECC
2014-2015	Arduino Workshop	ECSA/ISTE	23/08/2014	Mr. Jinesh K J, M.Tech, Asst. Prof ECE JECC
2014-2015	Simulation tool for Digital Lab	ECSA/ISTE	15/07/2014	Mr. Dipinkrishnan R, M.Tech, Asst. Prof ECE JECC
2014-2015	Modern Trends in Telecommunication	ECSA/ISTE	15/06/2014	Mr. Ravichandran C Divisional

				Engineer Transmission BSNL Malappuram
2013-2014	Workshop on 'Embedded Systems Training and Robotics'	IEEE Student Chapter	9/11/2013	Mr. Sunil Paul (CTO, Techjeeva, Asst.Prof. Vimal Jyothi Engg. College, Chemperi).
2013-2014	All Kerala IEEE PES Quiz	IEEE Student Chapter	9/11/2013	Mr Jinesh K J ,AP ,ECE ,JECC
2013-2014	PCB Design and Fabrication	IEEE Student Chapter	30-08-2013 to 1-09- 2103	Mr. C Karunakaran, Assistant Professor ME,JECC
2013-2014	PCB Designing Workshop	ECSA/ISTE	21/03/2014	Mr. Jinesh K J, M.Tech, Asst. Prof ECE JECC
2013-2014	A workshop on LaTeX	ECSA/ISTE	15/01/2014	Ms. Anjitha V, Asst. Professor, Dept. of ECE
2012-2013	Indian Space Programme	ISTE	06/02/2013	Mr. S Gopakumar Consultant C- DIT Trivandrum Dy Director (Rtd) VSSCTvm
2012-2013	GPS Systems	ISTE	06/02/2013	Mr. Hemachandra n S Group Head

				CSNG, IISU Tvm
2012-2013	Introduction o Inertial Navigation Systems	ISTE	07/02/2013	Mr. R Praveen Scientist/ Engineer SD, IISU ,VSSC Tvm
2012-2013	Satellite Power Systems	ISTE	08/02/2013	Dr. Bibin John Scientist/ Engineer SD, IISU , VSSC
2012-2013	Special Electrical Machines for Spacecraft Applications	ISTE	08/02/2013	Mr. V T Sadasivan Achari Head, Spacecraft Actuator Systems Division IISU Tvm
2012-2013	Labview Hands on Session	ECSA/ISTE	07/02/2013	Mr. C Karunakaran Asst. Professor, Dept. of ME
2012-2013	A workshop on LaTeX	ECSA/ISTE	22/02/13	Ms. Anjitha V, Asst. Professor, Dept. of ECE
2012-2013	PCB designing workshop	ECSA/ISTE	11/1/2013	Mr. Jinesh K J, M.Tech, Asst. Prof ECE JECC
2012-2013	A Hobby Circuits Exhibition	ECSA/ISTE	14/09/2012	Mr. Jinesh K J, M.Tech, Asst. Prof ECE JECC
2012-2013	A set of events to improve the professional skills of the students of ECE including Aptitude test, Group	ECSA/ISTE	22/08/2012	Fr. Roy Vadakkan , Asst. Prof ,BSH JECC

	Discussions, and Best Mini Project presentation			
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Organization of paper contest, Design contest etc. and achievements

Department of ECE conducts every year Technical Events in which some events are arranged for Electronics Engineering students from JECC as well as other colleges and prizes are awarded:

- Paper Presentation
- Implimented FM Station Beats FM
- Project Exhibition

Sl No	Events	Description	Month and Year of conduct
1	Tharang 12	Open House - School Students - Exhibition	Jan-12
2	Tharang 12	Vibhavana- paper presentation	Jan-12
3	Tharang 12	Circuit Debugging	Jan-12
4	ECSA Project Expo-12	Project Exhibition	Apr-12
5	A Hobby Circuits Exhibition	Hobby Circuits	Sep-12
6	Tharang 12 v2	Vibhavana- paper presentation contest	Nov-12-13
7	Tharang 12 V2	Circuit debugging contest	Nov-12-13
8	Project Expo	Project Exhibition	Apr-13
9	Tharang 2014	Hunger game- circuit debugging contest	Jan-14
10	Tharang 2014	Vibhavana- paper presentation contest	Jan-14
11	Tharang 2014	Implimented FM Station Beats FM	Jan-14
12	Tharang 2014	Dhrishyam Film Contest	Jan-14
13	Project Expo	Project Exhibition	Apr-14
14	Tharang 2015	Circuit debugging contest	Jan-15
15	Srishti	Project Exhibition	Mar-15

Publication of Technical Magazines, Newsletters etc

The Department of EEE has come out with a Newsletter highlighting the achievements, programmes organized and also with some latest information and updates in the current affairs of their respective fields in the Year 2014.

News Letters			
Sl No	Month /Year	Title	Publisher
1	Jun-13	ECE News March 2013 - Volume 3 Issue 1	Jyothi Engineering College, ECE Department
2	Dec-13	ECE News September 2013- Volume 3 Issue 2	Jyothi Engineering College, ECE Department
4	Mar-14	ECE News March 2014- Volume 4 Issue 2	Jyothi Engineering College, ECE Department
5	Dec-14	ECE News August 2014- Volume 4 Issue 3	Jyothi Engineering College, ECE Department

Two newsletters are issued every year, one every six month. All the departmental activities, student and Staff achievements are included in it.

Department News Letter Vol 4 Issue 4 2014



I. DEPARTMENT ACTIVITIES & ACHIEVEMENTS

I.1. AEISA ACTIVITIES

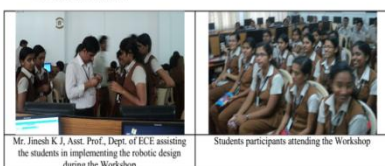
Applied Electronics & Instrumentation Students' Association (AEISA) for the academic year 2014-15 was inaugurated on 04/09/2014. The Chief Guest was Mr. Louis P. J., Sr. Manager, Utility, Indian Rare Earth Limited, Aluva. A talk on "Instrumentation & PLC" was delivered by the Chief Guest as a part of the inauguration.



Chief Guest Mr. Louis P. J., (Sr. Manager, Utility, Indian Rare Earth Limited, Aluva) delivering the inaugural address

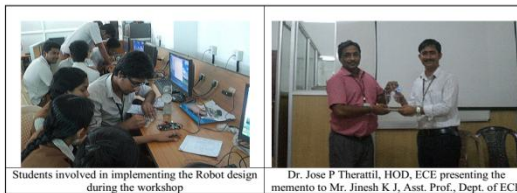
I.2. PROFESSIONAL CLUB ACTIVITIES

ROBINO - Robotics workshop using Arduino Sponsored by ISTE Student Chapter JECC. A two day workshop titled **ROBINO - Workshop on Robotics using Arduino Platform** - Sponsored by ISTE Student Chapter, JECC was organized on 16/10/2014 and 17/10/2014. 43 Students from the Dept. of ECE and Dept. of IT participated in the Workshop. Mr. Jinesh K. J., Asst. Professor handled all the sessions of the Workshop.



Mr. Jinesh K. J., Asst. Prof., Dept. of ECE assisting the students in implementing the robotic design during the Workshop

Students participants attending the Workshop



Students involved in implementing the Robot design during the workshop

Dr. Jose P Therattil, HOD, ECE presenting the memento to Mr. Jinesh K. J., Asst. Prof., Dept. of ECE

I.3. PLACEMENT

I.3.1. INFOSYS

Following 9 students of 2011-15 ECE Batch have achieved placement in Infosys Ltd during the on-campus recruitment process held on 01/10/2014.



Ms. Anusha K B

Ms. Grace Mary C Anto

Ms. Mannya Elizabeth Chandry

Mr. Mathew J Kodenkandath

Ms. Mubeena K

Ms. Nithara Radhakrishnan



Mr. Roshin C Jackson

Ms. Simi Simon P

Ms. Thasneem V A

I.3.2. FEDERAL BANK

Following 6 students of 2010-14 ECE Batch have achieved placement in Federal Bank Ltd during the recruitment process held on 30/10/2014 and 01/11/2014.



Mr. Jan Win Sunny

Mr. Joe Neelankavil

Ms. Neshma A N

Ms. Nivia George

Ms. Rose Mary John

Ms. Shinu Shoby





1.4. FAREWELL TO MS. DHANYA NAIR (Instructor, Dept. of ECE)

A farewell ceremony was organized by the Dept. of ECE to wish farewell to Ms. Dhanya Nair on 14/11/2014. Ms. Dhanya Nair served as Instructor, in the Dept. of ECE for 7 years. Rev. Fr. Jose Punnoliparambil Executive Manager, Dr. K K Babu, Principal, Er. Thomas Mathew, Administrator, Er. Bobby Peter, Asst Administrator graced the function with their presence. Dr. Jose P Therattil welcomed the gathering. Management representatives, Dr. Jose P Therattil (HOD), Ms. Sindhu S (Asst. Professor) and Ms. Elease Davi, (Instructor) wished their farewell to Ms. Dhanya Nair. Rev. Fr. Jose Punnoliparambil, Exec. Manager presented the memento.




STAFF ACTIVITIES & ACHIEVEMENTS



2.1. PAPER PUBLICATIONS

1. Ms. Anjitha V, Asst. Professor along with Ms. Apply Jose, Ms. Deepa Merlin Dixon K, Ms. Najji Joseph, Ms. Silpa George E (2010-14 ECE Batch) published a paper titled "Performance Study of Edge Detection Operators" in the Proceedings of International Conference on Embedded Systems (ICES-2014), IEEE		Ms. Anjitha V
2. Mr. Jinesh K J, Asst. Professor along with Ms. Rose Mary John, Ms. Finky Francis, Mr. Joe Neelankavil, Mr. Alwyn Antony, Ms. Ancy Devassy (2010-14 ECE Batch) published a paper titled "Smart Public Transport System" in the proceedings of the International Conference on Embedded Systems (ICES-2014), IEEE		Mr. Jinesh K J
3. Mr. Abin Johns Raju, Asst. Prof., along with Ms. Lakshmi R, Ms. Tilty Tony, Ms. Vineetha Wilson, Ms. Nella V Francis & Ms. Theresa Jones of 2009-2013 ECE Batch published a paper titled "An analytical approach to the performance of Low Density Parity Check Codes" in the Proceedings of 2013 International Conference on Advanced Computing and Communication Systems (ICACCS), IEEE		Mr. Abin Johns Raju
4. Mr. Abin Johns Raju, Asst. Prof., along with Ms. Lakshmi R, Ms. Tilty Tony, Ms. Vineetha Wilson, Ms. Nella V Francis & Ms. Theresa Jones of 2009-2013 ECE Batch presented a paper titled "A Comparative Study of LDPC Codes & Convolutional Codes in BiModia PHY" in the proceedings of IEEE International Conference of Advanced Computing & Communication Systems (ICACCS), IEEE		Mr. Abin Johns Raju

2.2. PAPER PRESENTATIONS

1. Mr. Jobin Varghese, Asst. Professor presented a paper titled "Optimized Area Architecture for the Demodulation of Digital Frequency Modulated Audio Signals using FPGA", in the International Conference on Signal and Speech Processing-ELSEVIER held at TKM Engineering College, Kollam on 21/08/2014.	
2. Mr. Jobin Varghese, Asst. Professor presented a paper titled "Performance Analysis of SMAC and TDMA protocols under Varying Traffic Density over Wireless Sensor Networks", in the International Multi Conference on Innovations in Engineering and Technology - ELSEVIER held at VVIT, Bangalore on 22/08/2014.	
3. Mr. Jobin Varghese, Asst. Professor presented a paper titled "Dynamic Duty-Cycled MAC for Wireless Sensor Networks with Energy Harvesters", in The International Conference on Circuits, Communication, Control and Computing (I4C 2014)-IEEE, held at M.S Ramaiah Institute of Technology, Bangalore on 21/11/2014 and 22/11/2014.	

2.3. SEMINARS / WORKSHOPS CONDUCTED BY FACULTY

1. Mr. Jinesh K Jose, Asst. Professor, Dept. of ECE handled all the sessions of "ROBINO - Workshop on Robotics using Arduino Platform" - Sponsored by ISTE Student Chapter, organized by the Dept. of ECE, JECC on 16/10/2014 and 17/10/2014. 43 Students from the Dept. of ECE and Dept. of IT participated in the Workshop.		Mr. Jinesh K J
2. Mr. Rijo P C, Asst. Professor, Dept. of ECE conducted a seminar on "Performance Analysis of FinFET using High-K Dielectric" organized by ISTE Chapter, JECC on 07/11/2014.		Mr. Rijo P C

2.4. PARTICIPATION IN FDPs / SEMINARS / WORKSHOPS

- Mr. Vivek Lukose, Mr. Jobin Varghese, Mr. Rijo P C, Ms. Ambily Francis, Ms. Driya M K, and Ms. Naya K A have participated in the Faculty Development Programme on "Concepts Coaching", conducted by ICT Academy of Kerala from 12/11/2014 to 14/11/2014 at JECC.
- Mr. Ponnamma Raja M, Asst. Professor participated in the Short Term QIP Sponsored Course on "RF Circuits and Systems for Industrial Applications" organized by the Department of Electrical Engineering, IIT Kanpur from 18/09/2014 to 22/09/2014.

3. STUDENTS' ACTIVITIES AND ACHIEVEMENTS

- 3.1. STUDENTS' PROJECT PROPOSALS SELECTED FOR FUNDING AND PARTICIPATION IN "YUVA MASTER MIND-BIIS" COMPETITION**
- Project proposal titled "Eyeball Controlled Wheelchair using Raspberry Pi with Home Automation" by Ms. Anna Joby Manjila, Ms. Jisna Shajan, Ms. Livy Varghese, Ms. Melinda Sunny, Ms. Nivya M S (2011-2015 ECE Batch) under the guidance of Mr. Jinesh K J, Asst. Professor, Dept. of ECE is selected for funding to participate in the "Yuva Master Mind 2015" contest for innovative projects organized by Malayala Manorama News group, Kottayam.

Entrepreneurship Activities, product designs and innovations (4)

Innovations and Product designs					
Sl No	Reg No	Name	Sem/Y ear	Project Title	Remarks
1	JYAHEEC007 JYAHEEC002 JYAHEEC038 JYAHEEC050 JYAHEEC058	Anil C S Agesh Paul Prince Mary Shiya Andrews Tresa Joseph	S8, 2011	Vision Based Navigation System	Presented in Project EXPO Organized by ECSA
2	JYAHEEC009 JYAHEEC004 JYAHEEC018 JYAHEEC028 JYAHEEC053	Binoy Jhonson Aleena Josph Jerin Antony Mittu George P Sino K S	S8 2011	Wireless Space Tilt Mouse	Presented in Project EXPO Organized by ECSA
3	JYAHEEC010 JYAHEEC006 JYAHEEC011 JYAHEEC029 JYAHEEC036	Dinu Vincent Anargha A Divya P.P Dilin Anand N D Nivya N	S8 2011	12V DC Boost Regulator	Presented in Project EXPO Organized by ECSA
4	JYAHEEC023 JYAHEEC017 JYAHEEC030	Karthik Selvan Ann Mary Thomas Jainy Davis Neeba Jose	S8 2011	Xbee Robo for Remote Data Access	Presented in Project EXPO Organized by ECSA
5	JYAHEEC024	Lakshmi T	S8	Face	Presented in

	JYAHEEC014 JYAHEEC015 JYAHEEC019	George Thomas Greeshma Mohan Jinu Thomas	2011	Recognition System for Embedded Application	Project EXPO Organized by ECSA
6	JYAHEEC033 JYAHEEC032 JYAHEEC040 JYAHEEC041 JYAHEEC042	Nithin Davis Ninu P Rithu Abhraham Riya Susan Robin Joseph	S8 2011	Wireless Data Transceiver	Presented in Project EXPO Organized by ECSA
7	JYAHEEC057 JYAHEEC001 JYAHEEC037 JYAHEEC039	Tom Varghese Abhilash A Pinky V Peter Rinkumol P J	S8 2011	PC Based Arbitrary Waveform Generator	Presented in Project EXPO Organized by ECSA
8	JYAHEEC056 JYAHEEC027 JYAHEEC052 JYAHEEC055 JYAHEEC020	Tinto Varghese Mary Davis Sibil Rodrigues Swathy B Jithin Joy	S8 2011	Self Balancing Robot	Presented in Project EXPO Organized by ECSA
9	JYAHEEC016 JYAHEEC025 JYAHEEC026 JYAHEEC045	Harikrishnan P Lishoy C Thomas Mahesh T Saira Banu	S8 2011	Two wheeler Safety Enforcement system	Presented in Project EXPO Organized by ECSA
10	JYAHEEC060 JYAHEEC003 JYAHEEC048 JYAHEEC043	Vidya P Akhil C Joy Sangeetha Menon Rosmin C J	S8 2011	Underwater Robot	Presented in Project EXPO Organized by ECSA
11	JYAIEEC019 JYAIEEC020 JYAIEEC021 JYAIEEC055 JYAIEEC058	Jubin Paulson Justin Johnson Kochurani V A Sruthi K H Tinto Joy	S8 2012	Color based Data Storage	Presented in Project EXPO Organized by ECSA
12	JYAIEEC007 JYAIEEC012 JYAIEEC024 JYAIEEC048 JYAIEEC049	Anoop K S Don Wilson Lenish C Thomas Rinto Antony Robin P Jose	S8 2012	Solar Powered Efficient Ligting	Presented in Project EXPO Organized by ECSA
13	JYAIEEC003 JYAIEEC028 JYAIEEC041 JYAIEEC056 JYAIEEC060	Ajith P J Marymole Jose Preethi P Sruthi Krishna K Varun Jacob	S8 2012	Peak to Average Power Reduction of OFDM	Presented in Project EXPO Organized by ECSA
14	JYAIEEC001	Aiswarya Dileep	S8	Authentication	Presented in

	JYAIEEC013 JYAIEEC027 JYAIEEC038 JYAIEEC057	Grace Aloysious Mancy K Mathew Nisha Anandh Sruthi M	2012	System using Hand Vien Pattern	Project EXPO Organized by ECSA
15	JYAIEEC002 JYAIEEC010 JYAIEEC022 JYAIEEC023 JYAIEEC052	Ajayraj V Deepak Sreedharan Krishna Prabha R Lakshmi V Menon Saranya V	S8 2012	A Glove based Gesture Controlled USB Interface	Presented in Project EXPO Organized by ECSA
16	JYAIEEC005 JYAIEEC006 JYAIEEC011 JYAIEEC026 JYAIEEC031	Anagha P Anjali C K Deepthi M Nair Magnet Rose Mathew Monica Davis C	S8 2012	Indoor Navigation for Blind People	Presented in Project EXPO Organized by ECSA
17	JYAIEEC030 JYAIEEC035 JYAIEEC037 JYAIEEC043 JYAIEEC044	Minu Joy Neenu Jacob Nimmy Pious Reshma P G Reshma Raphel	S8 2012	Age-Invariant Face Recognition	Presented in Project EXPO Organized by ECSA
18	JYAIEEC009 JYAIEEC015 JYAIEEC017 JYAIEEC033 JYAIEEC051	Darshana Sureshkumar Jincy John E Jitin Paul David Narayanan P G Sandya M D	S8 2012	PID Controlled Inverted Pendulum	Presented in Project EXPO Organized by ECSA
19	JYAIEEC008 JYAIEEC025 JYAIEEC032 JYAIEEC042 JYAIEEC032	Charles Andrews E Limcy Cheriyan Monisha Simon Prince K P Rini Enis	S8 2012	GPS Based Security System	Best Innovative idea award from HCL Technologies
20	JYAIEEC014 JYAIEEC018 JYAIEEC029 JYAIEEC036 JYAIEEC047	Jerin Jose A Jojo Jose T Minna Nelson T Nikhil Vincent Rinta Vijayan	S8 2012	Maze Solving Robot with Map Generation	Presented in Project EXPO Organized by ECSA
21	JYAIEEC016 JYAIEEC039 JYAIEEC045 JYAIEEC050 JYAIEEC053	Jithin Jose M Nithin M Thomas Rijo K R Rosemole Davis Sebin George	S8 2012	Mobile Robot Navigation on Predefined Routes	Presented in Project EXPO Organized by ECSA
22	JYAIEEC004 JYAIEEC034 JYAIEEC040	Amala Rose K Naveen G Praveena P M	S8 2012	Text Display System based on Laser Projection	Presented in Project EXPO Organized by

	JYAIEEC054 JYAIEEC059	Sruthi Aravind Varun G			ECSA
23	JYAJEEC015 JYAJEEC018 JYAJEEC029 JYAJEEC037 JYAJEEC050	Chris Paul Lawrence Gifty C. Varghese Keerthi Joseph Nainy Philip Roni Jose George	S8 2013	Confidential Code Security Contrivance	Presented in Project EXPO Organized by ECSA
24	JYAJEEC004 JYAJEEC005 JYAJEEC035 JYAJEEC041 JYAJEEC042	Akhil Lawrence Amala Manjiyil Mary Francis Nicy Anto Nidhin George	S8 2013	Software Defined Radio	Presented in Project EXPO Organized by ECSA
25	JYAJEEC026 JYAJEEC032 JYAJEEC036 JYAJEEC039 JYAJEEC049	Josmy Jose Akkara Liviya Jacob Merin Rajan Pallan Neethu U Rinu Jose	S8 2013	Fingerprint Age determination using DWT and SVD	Best Project award
26	JYAJEEC021 JYAJEEC022 JYAJEEC025 JYAJEEC046 JYAJEEC051	Jerry Joy Jinu Jose K. Jones J Alapat Nithin Jose Rose Paul P	S8 2013	GSM Based LED Notice Board	Presented in Project EXPO Organized by ECSA
27	JYAJEEC048 JYAJEEC052 JYAJEEC053 JYAJEEC054 JYAJEEC055	Remya Stephen Ruksana C.K Senna Sunny Sherin George Sreedevi K S	S8 2013	Handwriting Recognition Using artificial Neural Network	Presented in Project EXPO Organized by ECSA
28	JYAJEEC030 JYAJEEC040 JYAJEEC057 JYAJEEC058 JYAJEEC060	Lakshmi R Nella V Francis Theresa Jones C Tilty Tony Vineetha Wilson	S8 2013	Performance Analysis of LDPC Codes	Selected in IEEE Conference
29	JYAJEEC001 JYAJEEC011 JYAJEEC013 JYAJEEC023 JYAJEEC038	Abina Menachery Ann Rose E J Athira Chacko Jithin Justice Raphi C Neenu Jose	S8 2013	FPGA Based Object Tracking System	Presented in Project EXPO Organized by ECSA
30	JYAJEEC007 JYAJEEC014 JYAJEEC019 JYAJEEC028 JYAJEEC033	Anitta Antony Augustine. G. Akkara Gifty Raju Karthika Viswanath Mahima Cherian	S8 2013	Text Localization using Discrete Wavelet Transform	Presented in Project EXPO Organized by ECSA
31	JYAJEEC006	Angela Papachan	S8	Voice	Presented in

	JYAJEEC017 JYAJEEC020 JYAJEEC047 JYAJEEC059	Porothur Dony J Muttath Jaina George Raphy A.V. Vidya K	2013	Recognition Robot	Project EXPO Organized by ECSA
32	JYAJEEC002 JYAJEEC003 JYAJEEC024 JYAJEEC027 JYAJEEC044	Ajisha P Abbaz Akhil Johny John Anto Joyal Joy Nimisha M	S8 2013	Neuron Implementation using VHDL Code	Presented in Project EXPO Organized by ECSA
33	JYAJEEC010 JYAJEEC031 JYAJEEC034 JYAJEEC043 JYAJEEC045	Anju Vincent Anna Rose Kurian Ashitha Francis A. Dhanya Rose Jose Stegin Joy	S8 2013	Remote Sensing Image Fusion using NSCT	Presented in Project EXPO Organized by ECSA
34	JYAJEEC008 JYAJEEC009 JYAJEEC012 JYAJEEC016 JYAJEEC056	Ann Jecko Lisa Thomas Manu .S. Vadukoot Nikhil Varghese Nisha Menon.K	S8 2013	Digital FM Demodulation using VHDL	Presented in Project EXPO Organized by ECSA
35	JYAKEEC002 JYAKEEC022 JYAKEEC029 JYAKEEC047 JYAKEEC060	Amrutha Wilson Janya Jayan Juliet Joju M Sherin Thomas Umesh Unni P	S8 2014	Automatic Exudate Detection For The Diagnosis Of Exudates Detection.	Presented in Project EXPO Organized by ECSA
36	JYAKEEC021 JYAKEEC023 JYAKEEC034 JYAKEEC036 JYAKEEC038	Jain Francis Jerin Joseph Nanditha K Neshma A N Nivia George	S8 2014	Comparative Study Of Various Qc- Ldpc Decoders	Presented in Project EXPO Organized by ECSA
37	JYAKEEC012 JYAKEEC027 JYAKEEC030 JYAKEEC056 JYAKEEC057	Dain Rapheal John Johnson Lidwin Cleetus Stephy Paul Thara Paul	S8 2014	Snakebot	Presented in Project EXPO Organized by ECSA
38	JYAKEEC018 JYAKEEC024 JYAKEEC035 JYAKEEC051	Gifin Paul Jibin V Jose Naveen Philip Sijan Thomas	S8 2014	Safety Auto Braking Using Mems Sensor	Presented in Project EXPO Organized by ECSA
39	JYAKEEC045 JYAKEEC046 JYAKEEC048 JYAKEEC049	Sandra Reji C Shaheer Shan Sherin Thomas Shinu Shoby	S8 2014	Wall Climbing Robot	Presented in Project EXPO Organized by ECSA

	JYAKEEC050	Shyamlal V S			
40	JYAKEEC006 JYAKEEC019 JYAKEEC042 JYAKEEC059	Anoop Francis Grace Paul Rincy P Nelson Tracy Jose	S8 2014	Fpga Based Speech Recognition System	Presented in Project EXPO Organized by ECSA
41	JYAKEEC014 JYAKEEC031 JYAKEEC055 JYAKEEC058	Evlin Thomas Liji Jose Stebin J Tharakan Thushara S	S8 2014	Detecting And Encrypting Moving Object From A Dynamic Scene	Presented in Project EXPO Organized by ECSA
42	JYAKEEC009 JYAKEEC032 JYAKEEC037 JYAKEEC041 JYAKEEC053	Antony Jacob Mariya Tony Nimpha Anto Renil T Vincent Sneha Jose	S8 2014	Fusion Of Iris & Fingerprint Biometric For Gender Recognition	Presented in Project EXPO Organized by ECSA
43	JYAKEEC025 JYAKEEC039 JYAKEEC040 JYAKEEC054 JYAKEEC061	Jinu Thankachan Rahul Unnikrishnan Remya Ravi Sophia Sweezal Alphonso Vishnu Vijayakumar	S8 2014	Smart Home Using Android	Presented in Project EXPO Organized by ECSA
44	JYAKEEC004 JYAKEEC005 JYAKEEC017 JYAKEEC021 JYAKEEC043	Anjali Geo K Ann Marie Antony George Sunny Jan Win Sunny Ronat Alice Cherian	S8 2014	Meal Assistance Robot	Presented in Project EXPO Organized by ECSA
45	JYAKEEC007 JYAKEEC013 JYAKEEC033 JYAKEEC052	Anphy Jose Deepa Merlin Dixon Naiji Joseph Silpa George E	S8 2014	Edge Detection Using Fpga	Presented in Project EXPO Organized by ECSA
46	JYAKEEC001 JYAKEEC003 JYAKEEC016 JYAKEEC026 JYAKEEC044	Alwyn Antony Ancy Devassy Finky Francis Joe Neelankavil Rose Mary John	S8 2014	Accident Minimizing System	Presented in Project EXPO Organized by ECSA
47	JYAKEEC008 JYAKEEC010 JYAKEEC011 JYAKEEC015 JYAKEEC028	Ansy Anto Anumary M V Daine Michael Fincy Jose Judith Sen E	S8 2014	Advanced License Plate Recognition System For Car Parking	Presented in Project EXPO Organized by ECSA

48	JYAJEEC004	Akhil Lawrence	S5 ECE	Choice based project group allocation software	Implemented
49	JYAJEEC004	Akhil Lawrence	S5 ECE	Choice based project group allocation software	Implemented
50	JYAKEEC009 JYAKEEC032, JYAKEEC037, JYAKEEC041, JYAKEEC 053	Antony Jacob , Mariya Tony , Nimpha Anto, Renil T Vincents Sneha Jose	S7 ECE	Finger print based gender identification	Funded from Malayala Manorama .
51	JYAKEEC009 JYAKEEC032, JYAKEEC037, JYAKEEC041, JYAKEEC 053	Antony Jacob , Mariya Tony , Nimpha Anto, Renil T Vincent, Sneha Jose	S7 ECE	Finger print based gender identification	Exhibited in Yuva Master Mind Exhibition Organized by Malayala manorama.
52	JYAKEEC004, JYAKEEC005, JYAKEEC021, JYAKEEC017, JYAKEEC 043	Anjali Geo , Ann Mary Antony Janwin Sunny, George Sunny, Ronat Alice Cheriyan	S7 ECE	Meal assistance Robot	Funded from Malayala Manorama .
53	JYAKEEC004, JYAKEEC005, JYAKEEC021, JYAKEEC017, JYAKEEC 043	Anjali Geo , Ann Mary Antony Janwin Sunny, George Sunny, Ronat Alice Cheriyan	S7 ECE	Meal assistance Robot	Exhibited in Yuva Master Mind Exhibition Organized by Malayala manorama.

45. List the teaching methods adopted by the faculty for different programmes.

- Active Learning
- Experimental Learning
- Problem-based Learning
- Web Based Learning
- Team-based Learning
- Project-based Learning

- Group Discussion
- Project work
- Assignments

46. How does the department ensure that programme objectives are constantly met and learning outcomes are monitored?

Motivate the student to participate in the National level competitive examinations and taking up remedial measures to enhance the student's skill and knowledge.

47. Highlight the participation of students and faculty in extension activities.

- Departmental students are part of College NSS Activities.
- Blood Donation Camp.
- Participation in World Women's Day .
- Participation in environmental awareness and pollution control Programmers.

48. Give details of "beyond syllabus scholarly activities" of the department.

A Central library, digital library and department library with excellent collection of reference books, text books are available. The central library remains open after the normal working hours so that students can do extra reading. The students can also refer to advanced text books suggested by the teacher, apart from the prescribed text and reference books listed in the syllabus.

The laboratories also remain open after working hours on request by students so they can improve their practical skills.

The institution conducts Techfest "Tharang" every year where the students can get an environment for self learning through paper presentation, project presentation. They also develop their leadership qualities and learn to work as part of team.

A computer centre with internet facility remains open after working hours in the evening. The day scholars and hostel students can make use of this facility. A number of e-journals are available in the digital library for the students.

Facilities for self learning

Facilities Available: Digital Library, Department Library, E learning Resources, Central Computing Facilities, Department Labs, Workshops and Seminars and Technical Events

Category of International Journals in central library

Elsevier Advanced Technology, North-Holland, Academic Press and Pergamon

List of Journals in central library

Sl. No.	List of Journals/Magazines
1	CSI
2	Dataquest
3	Digit
4	Electrical India
5	Electronics Bazaar
6	Electronics For You (w/CD)
7	Electronics Maker
8	Embedded For You
9	International Journal of Data Mining and Emerging Technologies
10	International Journal of Applied Research on Information Technology and Computing (IJARITAC)
11	Journal of Entrepreneurship
12	Journal of the Institution of Engineers -Series A
18	Journal on Electronics Engineering
19	Linux For You (with PRO+CD)
20	Outlook
21	PC Quest
22	Research Journal of Engineering and Technology (Online)
23	Resonance
24	Telecommunications
25	The Indian Journal of Technical Education
26	The Week
27	Time
28	University News

Contents of the self-learning modules:

- Paper presentation in seminars
- Group discussion & Role Play / Peer discussion
- Project related information- Record books
- Net browsing on education related topics
- CDs supplied along with text books
- CDs supplied along with journals
- Different Web sites for improving communication skills
- GATE material from Brilliant, GK Publishers

- GRE material for higher education abroad
- TOEFL CDs for language test for higher education abroad
- CAT/MAT entrance exam CDs
- Old question papers – hard and soft copies
- Competitive exam and subject fundamental related information
- Audio Visual materials
- Training classes in aptitude and basic subjects
- Solved Model Questions and multiple-choice-questions are available.
- Additional courses available for the 1st, 2nd, 3rd and 4th B.Tech programs.

Motivation

- Students are encouraged to utilize the self-learning modules available in the institute so as to develop their understanding on various emerging topics, come out with innovative ideas, prepare research papers and present them in various conferences and project exhibitions.
- Students are provided with internet facility in the Internet Lab in order to fetch the required information.
- Departmental Libraries are maintained by the respective departments for easy and quick access.
- Students are given assignments on advanced topics.
- The students are encouraged by faculty and by providing financial assistance for registration and travel for various technical activities.
- Staff members guide students for such activities.
- Through this programme, students are trained to achieve technical skills as per the expectation of various industries.

Students are guided on advanced topics and also in respect of the following:

Contents and explanations

Appropriate additional topics downloaded from internet

Material supplied by experts

Mini Projects

Assignments

49. State whether the programme/ department is accredited/ graded by other agencies? If yes, give details.

No

50. Briefly highlight the contributions of the department in generating new knowledge, basic or applied.

The department is actively involved in undertaking innovative projects in the new emerging areas in the specialty like Robotics, Wireless Communication, Signal processing, Embedded System and VLSI . Department has given idea to PCB fabrication in industrial level.

51. Detail five major Strengths, Weaknesses, Opportunities and Challenges (SWOC) of the department.

Strength:

- Eco – friendly and amicable working atmosphere.
- Excellent Infrastructure and Lab facilities.
- Experienced, dedicated and highly qualified Teaching Staff.
- College library as well as departmental library facility is available for faculty Members and students.
- Very Good result.
- Good and spontaneous assistance from non-teaching staff.
- Computer facility for departments as well as students
- Friendly attitude of teachers towards students,
- Annual parent-teachers“ meetings.
- Different Cultural programs, Quiz, Debate, magazines are organized in the department in regular basis.

Weakness:

Experienced and Ph.D. qualified faculty members are less in the department.

Opportunities:

1. Encouraging students to participate in academic as well as social enrichment program, e.g. NSS activity, Blood donation etc.
2. Students“ participation in intercollegiate competitions.
3. Preparing students for GATE, CAT and other competitive exams and in-house refresher Course for campus placement.

Challenges:

1. Heavy syllabus leading to lack of time for giving personal attention to students
2. Technical difficulties for continuous restructuring of course.

52. Future plans of the department

1. Formulating program in collaboration with industries, to educate the Students in accordance with their requirements. Infrastructure Development
2. Initiation to get financial and non-financial support for the students and faculty members of the self financing educational institutions similar to Government and Government aided Institutions



DEPARTMENT OF ELECTRICAL & ELECTRONICS ENGINEERING

1. Name of the Department : Department of Electrical & Electronics Engineering

2. Year of establishment : 2002

3. Is the Department part of a School/Faculty of the university? No.

4. Names of programmes offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., D.Sc., D.Litt., etc.) : UG, PG

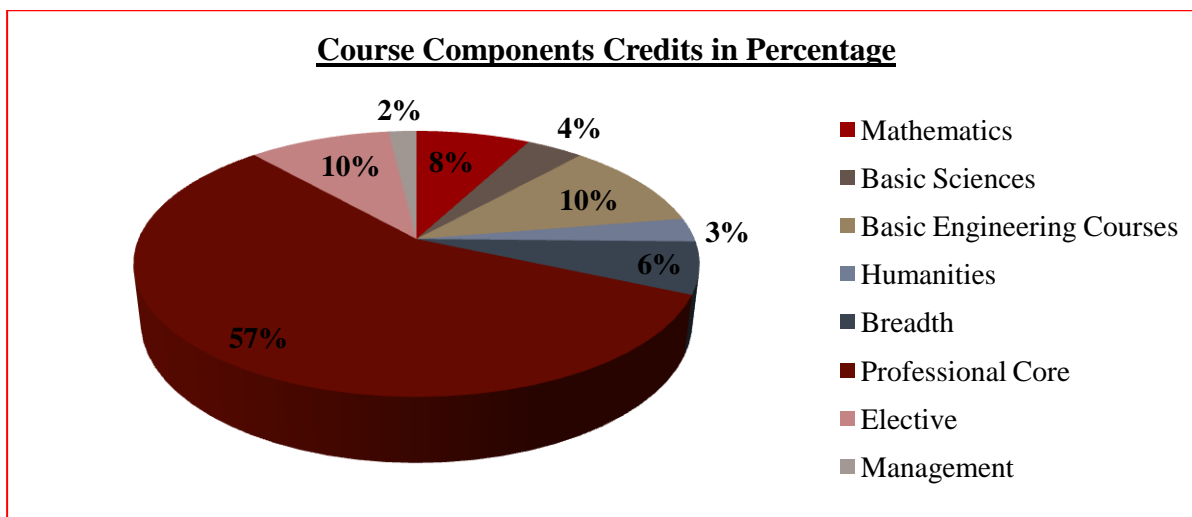
Courses offered

Sl No.	Courses offered	Intake	When started	Specialisation
1	B. Tech	60	2002	Electrical & Electronics Engineering
2	M. Tech	18	2012	Power Electronics

5. Interdisciplinary programmes and departments involved

Sl No.	Names of Interdisciplinary courses	Department involved
1	Engineering Mathematics I	Basic Science & Humanities
2	Engineering Mathematics II	Basic Science & Humanities
3	Engineering Mathematics III	Basic Science & Humanities
4	Engineering Mathematics IV	Basic Science & Humanities
5	Engineering Physics	Basic Science & Humanities
6	Physics Lab	Basic Science & Humanities
7	Engineering Chemistry	Basic Science & Humanities
8	Chemistry Lab	Basic Science & Humanities
9	Engineering Mechanics	Civil & Mechanical
10	Basics of Civil & Mechanical Engg	Civil & Mechanical
11	Basics of Electrical, Electronics & Communication Engg	Electrical, Electronics & Communication Engg
12	Engineering Graphics	Mechanical
13	Computer Programming in C	Computer Science
14	Mechanical workshop	Mechanical
15	Electrical & Civil Workshop	Electrical & Civil
16	Humanities & Communication Skills	Basic Science & Humanities
17	Environmental Science	Electrical
18	Mechanical Engg	Mechanical
19	Mechanical Engg Lab	Mechanical
20	Analog & Digital Communication	Electronics & Communication

21	Digital Signal Processing	Electronics & Communication
22	Electric Circuit Theory	Electrical Engg
23	Electromagnetic Field Theory	Electrical Engg
24	Analog Electronics	Electrical Engg
25	Basic Electrical Engg Lab	Electrical Engg
26	Analog Electronics Lab	Electrical Engg
27	Signals & Systems	Electrical Engg
28	DC Machines & Transformers	Electrical Engg
29	Digital Electronics	Electrical Engg
30	Electrical Measurements & Instrumentation Systems	Electrical Engg
31	Electrical Measurements & Instrumentation Lab	Electrical Engg
32	Synchronous & Induction Machines	Electrical Engg
33	Power System Generation, Transmission & Distribution	Electrical Engg
34	Linear Control Systems	Electrical Engg
35	Power Electronics	Electrical Engg
36	Digital System Design	Electrical Engg
37	Electrical Material Science	Electrical Engg
38	Electrical Machines Lab I	Electrical Engg
39	Digital Electronics lab	Electrical Engg
40	Microprocessors & Microcontrollers	Electrical Engg
41	Modern Control Theory	Electrical Engg
42	Electric Drives	Electrical Engg
43	Electrical Engg Drawing	Electrical Engg
44	Electrical Machines Lab II	Electrical Engg
45	Mini Project	Electrical Engg
46	Power System Analysis	Electrical Engg
47	Electrical Machine Design	Electrical Engg
48	Power Electronics Lab	Electrical Engg
49	Advanced Electrical Engg Lab	Electrical Engg
50	Project	Electrical Engg
51	Electrical System Design	Electrical Engg
52	Power System protection & Utilization	Electrical Engg
53	Seminar	Electrical Engg
54	Project	Electrical Engg
55	Viva Voce	Electrical Engg
56	Electives	
57	Numerical Analysis & Optimization Theory	Electrical Engg
58	Bio-Medical Engg	Electrical Engg
59	Professional Ethics	Electrical Engg
60	Process Control & Instrumentation	Electrical Engg
61	Special Electrical Machines	Electrical Engg
62	Organizational Behavior	Electrical Engg
63	Engg Economics & Principles of Management	Basic Science & Humanities



6. Courses in collaboration with other universities, industries, foreign institutions, etc.

Sl. No.	Name of Industry/Organization	Activities through the MoU
1	Hykon India Pvt. Ltd.	Industrial in-plant training.
2	Entuple Technologies Pvt. Ltd.	Workshops for the students and faculty on the advanced design and analysis softwares.

7. Details of programmes discontinued, if any, with reasons: Nil

8. Examination System: Annual/Semester/Trimester/Choice Based Credit System : Semester

B. Tech programme		M. Tech programme	
I Year	Annual	I Year	Semester
II Year	Semester	II Year	Semester
III Year	Semester		
IV Year	Semester		

9. Participation of the department in the courses offered by other departments

Sl No.	Courses name	Offered to (Dept.)
1	Electrical Engineering lab	Electronics Department
2	Electrical Technology	Mechanical department
3	Electrical Engineering lab	Mechanical Department
4	Basic Electrical Engineering	Civil, Mechanical, Computer science & Electronics Department

10. Number of teaching posts sanctioned, filled and actual (Professors/Associate Professors/Asst. Professors/others)

Category	Sanctioned	Filled
Professors	-	3
Associate Professors	-	-
Assistant Professors	-	15

11. Faculty profile with name, qualification, designation, area of specialization, experience**(D.Sc./ D.Litt. /Ph.D. / M. Phil. etc.,)**

Sl No.	Name	Qualification	Designation	Specialization	Years of experience
1	RATNAN P	M.Tech.	Head	Power Electronics	17
2	K. VENUGOPALAN	M.Tech.	Professor	Power System	33
3	Dr. PRAVEEN R P	M.Tech.	Professor	Electrical Machines	11
4	ANU SUNNY	M.Tech.	Asst Professor	Power System	10
5	RESHMA RAJ C	M.E.	Asst Professor	Power Electronics	11
6	JENSON JOSE	M.Tech.	Asst Professor	Power Electronics	8
7	DELLA DAVID	M.Tech.	Asst Professor	Power Electronics	8
8	PRASAD C	M. E.	Asst Professor	Power System	6
9	VINEETH V V	M.Tech.	Asst Professor	Embedded systems	7
10	SOUMYA C	M.Tech.	Asst Professor	Power Electronics	5
11	SARITHA P	M.Tech.	Asst Professor	Power Electronics	5
12	ASWATHY RAJAN	M.Tech.	Asst Professor	Power Electronics	5
13	AATHIRA K V	M.Tech.	Asst Professor	Industrial Drives & Control	4
14	RENJINI G	M.Tech.	Asst Professor	Industrial Drives & Control	4
15	SREETHUMOL	M.Tech.	Asst Professor	Industrial Drives & Control	3
16	KAVITHA BHASKAR	M.Tech.	Asst Professor	Power Electronics	4
17	AKHIL A BALAKRISHNAN	M.Tech.	Asst Professor	Control & Instrumentation	2
18	ROSHIMA T V	M.Tech.	Asst Professor	Power System	5
19	NITHYA K	M-Tech	Asst Professor	Power Electronics	5 months

12. List of senior Visiting Fellows, adjunct faculty, Emeritus Professors: Nil**13. Percentage of classes taken by temporary faculty – programme-wise information: Nil****14. Programme-wise Student Teacher Ratio**STR is calculated as $= (x + y + z)/N1$

where, x = Number of students in 2nd year of the programme

y = Number of students in 3rd year of the programme

z = Number of students in 4th year of the programme

N1 = Total number of faculty members in the programme (by considering fractional load)

Year	X	Y	Z	X+Y+Z	N1	STR
CAY (2011-2012)						
CAY (2012-2013)	44	64	59	167	13	12.85
CAY (2013-2014)	56	44	64	164	11	14.91
CAY (2014-2015)	64	56	44	164	12	13.67

15. Number of academic support staff (technical) and administrative staff: sanctioned, filled and actual

Year	Technical staff			Administrative staff		
	Sanctioned	Filled	Actual	-	-	-
2011-2012	NA	5	4	-	-	--
2012-2013	NA	5	5	-	-	-
2013-2014	NA	5	5	-	-	--
2014-2015	NA	5	5	-	-	-

16. Research thrust areas as recognized by major funding agencies : Nil

17. Number of faculty with ongoing projects from a) national b) international funding agencies and c) Total grants received. Give the names of the funding agencies, project title and grants received project-wise.

Nil

18. Inter-institutional collaborative projects and associated grants received a) National collaboration b) International collaboration

Nil

19. Departmental projects funded by DST-FIST; UGC-SAP/CAS, DPE; DBT, ICSSR, AICTE, etc.; total grants received.

Nil

20. Research facility / centre with

state recognition Nil

national recognition Nil

international recognition Nil

21. Special research laboratories sponsored by / created by industry or corporate bodies

Nil

22. Publications:

*** Number of papers published in peer reviewed journals (national / international)**

*** Monographs**

*** Chapters in Books**

*** Edited Books**

*** Books with ISBN with details of publishers**

*** Number listed in International Database (For e.g. Web of Science, Scopus, Humanities International Complete, Dare Database - International Social Sciences Directory, EBSCO host, etc.)**

*** Citation Index – range / average**

*** SNIP**

*** SJR**

*** Impact Factor – range / average**

*** h-index**

Sl. No.	Name of The Faculty	No. of papers published	Details of papers published	International Journal(IJ),International Conference(IC),National Conference(NC)
1	Praveen R P	21	A)A Novel Slotless Halbach Array Permanent Magnet Brushless DC Motor For Spacecraft Applications B)Design And Analysis Of A Hybrid Stepper Motor For Acuating A Gimbal Of Control Moment Gyroscope C) Optimal Design Of Surface Mounted Peramanent Magnet Bldc Motor For Spacecraft Applications D)Design And Analysis Of Zero Cogging Brushless Dc Motor For Spacecraft Applications E)Design And Finite Element Analysis Of Hybrid Stepper Motor For Spacecraft Applications F)Design And Analysis Of Zero Cogging	a)IJ b)IJ c)IJ d)IJ e)IC f)IC

			Brushless Dc Motor For Spacecraft Applications	
			G)Design And Analysis Of Enclosed Rotor Halbach Array Brushless Dc Motor For Spacecraft Applications	g)IC
			H)A Novel Slotless PMBLDC Motor For Precise Positioning Applications	h)IC
			I)Optimal Design Of A Surface Mounted Permanent Magnet BLDC Motor For Spacecraft Applications	i)IC
			J)A Novel Fuzzy Logic Controller Based Automatic Caution Order System For Indian Railways	j)IC
			K)Development Of Control Electronics Of A PMBLDC Motor For An Autonomous Rover Application In Space	k)IC
			L)Vector Control Of Three Phase PMSM Drive Using Power Transformations For Future Spacecraft Applications	l)IC
			M)Development Of Control Electronics Of A PMBLDC Motor For An Autonomous Rover Application In Space	m)NC
			N) Development Of Control Electronics Of A PMBLDC Motor For An Autonomous Rover Application In Space	n)NC
			O)Development Of Control Electronics Of A PMBLDC Motor For An Autonomous Rover Application In Space	o)NC
			P)Mathematical Modeling Of PMSM Drive For Spacecraft Application	p)NC
			Q)Mathematical Modeling Of PMSM Drive For Future Spacecraft Application	q)NC
			R)Vector Control Of Three Phase PMSM Drive Using Power Transformations For Future Spacecraft Applications	r)NC
			S)Design And Analysis Of A Hybrid Stepper Motor Using Finite Element Analysis	s)NC
			T)Improved Design And Performance Optimization Of Hybrid Stepper Motor For Spacecraft Applications	t)NC
			U)Design And Analysis Of A Hybrid Stepper Motor For Spacecraft Applications	u)NC

2	Aathira K V	10	<p>A)An Improved ZVS DC-DC Converter With Auxiliary Resonant Circuit</p> <p>B) Soft Switching DC-DC Converter Using HI-Bridge Auxiliary Resonant Circuit</p> <p>C)A Coupled Inductor Buck Boost DC-DC Converter With Wide Voltage Conversion Range</p> <p>D) ZVT-ZCT PWM Boost Converter Using Active Snubber For Renewable Energy Application</p> <p>E)ZVT-ZCT PWM Boost Converter Using Active Snubber For Renewable Energy Application</p> <p>F)A Review Of Buck-Boost Dc-Dc Converter Having Wide Dc Conversion Range</p> <p>G)A Review Of Buck-Boost Dc-Dc Converter Having Wide Dc Conversion Range</p> <p>H)A Coupled Inductor Buck Boost DC-DC Converter With Wide Voltage Conversion Range</p> <p>I)A DC-DC Converter With Wide Voltage Conversion</p> <p>J)A High Frequency DC-DC Converter With Soft Switching Technique</p>	<p>a)IC</p> <p>b)IC</p> <p>c)IC</p> <p>d)NC</p> <p>e)NC</p> <p>f)NC</p> <p>g)NC</p> <p>h)NC</p> <p>i)NC</p> <p>j)NC</p>
3	Ashni Elisa George	2	<p>A)Effective Harnessing Of Wind Energy Using Pitch Controlled Turbine Blades</p> <p>B)Nonlinear Θ-D Control Law For The Lateral Dynamics Of Re-Entry Vehicle</p>	<p>a)IC</p> <p>b)NC</p>
4	Jenson Jose P	7	<p>A)A Novel Seven Level Inverter With Reduced Number Of Switches</p> <p>B)11 Level Multilevel Inverter With Reduced Number Of Switches</p> <p>C)A Novel Seven Level Inverter With Reduced Number Of Switches</p> <p>D)Multilevel Inverter With Reduced Number Of Switches</p> <p>E)A Novel Seven Level Inverter With Reduced Number Of Switches</p> <p>F)A Novel Eleven Level Inverter With Reduced Number Of Switches</p> <p>G)Multilevel Inverter With Reduced Number Of Switches</p>	<p>a)IC</p> <p>b)IC</p> <p>c)NC</p> <p>d)NC</p> <p>e)NC</p> <p>f)NC</p> <p>g)NC</p>
5	Aswathy Rajan	2	<p>A)Design Of Speed Controller For Actuator In Altitude Control System In Space Crafts</p> <p>B)An Unfolding Type Fly Back Inverter With Incremental Conductance Method For AC Module Application</p>	<p>a)IC</p> <p>b)NC</p>

6	Kavitha Bhaskar	2	A)Implementation Of MPPT In A Capacitor Switched Regenerative Snubber For DC-DC Boost Converter B)A Solar MPPT Charger Using CUK Converter For Stand Alone Application	a)IC b)NC
7	Renjini G	7	A)Analysis And Comparison Of Inductor Coupled Buck-Boost Converter Combining KY Converter And SR Buck Converter B)Analysis And Design Of Bridgeless Buck PFC Rectifier With Single Inductor C)Inductor Coupled Buck Boost Converter Combining KY Converter And SR Buck Converter D)Analysis And Comparison Of Inductor Coupled Buck-Boost Converter Combining KY Converter And SR Buck Converter E)A Survey Of Single Stage Non-Isolated Power Factor Correction Topologies F)Analysis And Design Of Bridgeless Buck PFC Rectifier With Single Inductor G)Bridgeless Buck PFC Rectifier With Single Inductor	a)IC b)IC c)NC d)NC e)NC f)NC g)NC
8	Reshma Raj C	6	A)High Gain Boost Converter With Input Current Ripple Reduction B)High Frequency Quasi Resonant Sepic Converter For Wide Range Of Operation C)A Survey Of Transformer Less High Gain Boost Converters D)High Gain Boost Converter With Input Current Ripple Reduction E)High Frequency Quasi Resonant Sepic Converter For Low Power Applications F)High Frequency Quasi Resonant Sepic Converter For Wide Range Of Operation	a)IC b)IC c)NC d)NC e)NC f)NC
9	Akhil A Balakrishnan	3	A)Sensorless Control Of Brushless DC Motor For Low Speed Aerospace Applications B)Sensorless Control Of Brushless Dc Motor For Low Speed Aerospace Applications C)Sensorless Control Of Brushless Dc Motor For Low Speed Aerospace Applications	a)IC b)NC c)NC
10	Sreethumol	4	A)Interleaved Soft Switched Non Isolated Boost Converter With Improved Voltage Regulation B)Limitations Of High Step Up Dc-Dc Converters C)Limitations Of High Step Up Dc-Dc Converters D)An Interleaved Soft Switched Two Inductor Boost Converter	a)IC b)NC c)NC d)NC

11	Saritha P	7	<p>A)A Novel Multilevel Inverter Using Single Carrier PWM Technique</p> <p>B)A Nine Level Multilevel Inverter With DC Link Switches</p> <p>C)A Nine Level Multilevel Inverter With DC Link Switches</p> <p>D)A Novel Multilevel Inverter Using Single Carrier PWM Technique</p> <p>E)A Nine Level Multilevel Inverter With DC Link Switches</p> <p>F)Nine Level Inverter Using Single Carrier PWM Technique</p> <p>G)A Nine Level Multilevel Inverter With DC Link Switches</p>	<p>a)IC</p> <p>b)NC</p> <p>c)NC</p> <p>d)NC</p> <p>e)NC</p> <p>f)NC</p> <p>g)IC</p>
12	Della David	9	<p>A)Digital Control Of A Soft Switched Interleaved Boost Converter</p> <p>B)A New Single Stage Three Level AC-Dc Converter</p> <p>C)A Passive Soft Switched Interleaved Boost Converter For Space Applications</p> <p>D)A Passive Soft Switched Interleaved Boost Converter For Space Applications</p> <p>E)Digital Control Of A Soft Switched Interleaved Boost Converter</p> <p>F)An Interleaved Boost Converter With Passive Soft Switching Strategy</p> <p>G)A Study Of Single Phase Single Stage Power Factor Corrected Converters</p> <p>H)A New Single Phase Single Stage Power Factor Corrected Converter</p> <p>I)A New Single Phase Single Stage Power Factor Corrected Converter With Improved Voltage Regulation</p>	<p>a)IC</p> <p>b)IC</p> <p>c)NC</p> <p>d)NC</p> <p>e)NC</p> <p>f)NC</p> <p>g)NC</p> <p>h)IC</p> <p>i)NC</p>
13	Anees V. P	3	<p>A)A Survey Of Field Programmable Gate Array Based High Switching Frequency Inverter</p> <p>B)A Survey Of Field Programmable Gate Array Based High Switching Frequency Inverter</p> <p>C)Low Cost Direct Torque Controller For Induction Motor Using A Single Current Sensor</p>	<p>a)NC</p> <p>b)NC</p> <p>c)NC</p>

23. Details of patents and income generated: Nil

24. Areas of consultancy and income generated : Nil

25. Faculty selected nationally / internationally to visit other laboratories / institutions / industries in India and abroad : Nil

26. Faculty serving in a) National committees b) International committees c) Editorial Boards d) any other (please specify) :Nil

27. Faculty recharging strategies (UGC, ASC, Refresher / orientation programs, workshops, training programs and similar programs).

The following are the details of FDP/Seminar/Conferences attended by the faculty

FDP/Seminar/Conferences	Any other contributor y institute /industry	Developed /Organized by	Duratio n	Attended by
STTP-Advances in Control Strategies and Instrumentation, 1st -7th August 2012	DTE	GEC Thrissur	7days	Ms. Reshma Raj C
Short term course - Professional Development of Faculties in self-financing Engineering colleges, 10 th -12th October 2012	University of Calicut	UGC-Academic staff college	3Days	Ms. Sreethumol, M.V
STTP-Recent Trends in Power Electronics November 2012	TEQIP	GEC Thrissur	5 days	Ms. Della David
STTP -Methodology for Engineering Research,15 th -17 th Nov 2012	DTE	CET Trivandrum	3Days	Dr. Praveen R.P.
FDP-Recent advancements in Power electronics		GEC Thrissur	1 week	Mr. Jenson Jose
FDP-Recent advancements in Power electronics		GEC Thrissur	1 week	Ms. Della David
FDP- Design testing and Launching of satellites 6th to 8th Feb 2013	ISTE	JECC	3 days	Ms.Anu Sunny
FDP- Design testing and Launching of satellites 6th to 8th Feb 2013	ISTE	JECC	3 days	Ms. Reshma Raj C
FDP- Design testing and Launching of satellites 6th to 8th Feb	ISTE	JECC	3 days	Mr. Jenson Jose Ms. Della David Mr. Prasad C

2013				Mr. Vineeth V.V Ms. Soumya C Ms. Aswathy Rajan Ms. Aathira K.V Ms. Sreethumol, M.V Ms. Liza Baby Ms. Aleena Mariya
Short Term course on MSP 430 Microcontroller based System Design 23 rd -24 th February 2014	TEQIP	NIT Trichy	2 days	Ms. Roshima T V
FDP on“Grid Integration of Distributed Energy Sources” 27 th -29 th June 2013	TEQIP	College of Engg: Perumon	3 days	Dr. Praveen R.P
FDP on communication skills through language lab	AICTE	NSS college of Engg: Palakkad	2 weeks	Mr. Prasad C Mr. VINEETH V. V
FDP for improving professional excellence 5 th & 6 th July 2013	CSR , Pariyaram	JECC	2 days	Mr. Ratnan P Ms. Anu Sunny Ms. Reshma Raj C Mr. Jenson Jose Ms. Della David Mr. Prasad C Mr. Vineeth V.V Ms. SARITHA P Ms. ASWATHY RAJAN Ms. Aathira K.V Ms. Renjini G Ms. Sreethumol, M.V Ms. Kavitha Bhaskar
FDP -Early Career Development Program 4-8 November 2013	IEEE GOLD Kerala Section and VAST IEEE Educationa Activities Board	VidyaAcademy of Science and Technology, TCR	5days	Ms. KAVITHA BHASKAR Mr. AKHIL A BALAKRISHNAN
FDP on Smart Power Electronic Controllers using Programable Logic Devices Nov. 18-23, 2013	TEQIP	RIT Kottayam	5Days	Mr. ANEES V.P

FDP on electrical estimation and energy management' 17 th - 19 th Dec 2013,	TEQIP	GEC, Thrissur	3 days	Ms.Anu Sunny Ms. Sreethumol, M.V
Workshop on Understanding IGBT: from device to inverter 8 th April 2014	TEQIP	NIT Trichy	1 day	Ms. ROSHIMA T V
International workshop on Perspectives in dynamical Systems and Control 17 th -21 st March 2014	TEQIP	IIT Bombay	5 days	Ms. ROSHIMA T V
STTP on Lab VIEW Programming for Engineering Research, 19 th – 23 rd May 2014	DTE	Govt. College of Engineering , Kannur	5 days	Mr. AKHIL A BALAKRISHNA N
Seminar on Teaching control System using MATLAB and SIMULINK, 6 th JUNE 2014		MATLAB Mathwork	1 day	Mr. AKHIL A BALAKRISHNA N Mr. Vineeth V.V
STTP on Advanced Control System Design and Applications 9 th – 14 th June 2014	ISTE - SRM	Mar Baselios college of Engineering & Technology, TVM	6 days	Ms. ASHNI ELISA GEORGE
STTP on Power System Control Using Power Electronics 16 th - 21 st June 2014	ISTE - SRM	JECC	6 days	Ms. Reshma Raj C Ms. ASWATHY RAJAN Ms. SOUMYA C Ms. Aathira K.V Ms. RENJINI G
FDP on “Conceptional Teaching” 12 th -14 th November 2014	ICT Academy of Kerala	JECC	3 days	Ms. SOUMYA C Mr. AKHIL A BALAKRISHNA N Ms. ROSHIMA T V
FDP on “Power Generation and Transmission” 17 th -22 nd November 2014	DTE	CET Trivandrum	6 days	Ms. ASWATHY RAJAN
FDP on “Train the Trainer in Empower Programme in Life Skills” 15 th -17 th Dec 2014	ICT Academy of Kerala	JECC	3 days	Ms. ASWATHY RAJAN Ms. SARITHA P
FDP on “Train the Trainer in Empower Programme in Life Skills” 15 th -17 th Dec 2014	ICT Academy of Kerala	JECC	3 days	
FDP on “Control System Design” 16 th -20 th Dec 2014		IIST Trivandrum	5 days	Mr. RATNAN P

Guest Lectures

Guest lectures are arranged to plug the gap between Institute and Industry. This may transform and also help the staff to gather additional knowledge.

Module Description	Any other contributory institute/ industry	Developed /Organized by	Duration	Resource Person
A talk on “Basic Principles of Law”		AEEE	22 nd June 2012	Adv. P Bhaskaran High Court of
A talk on “Understanding the		AEEE	13 th July 2012	Fr. Roy Vadakkan, Assistant
An expert talk on “Renewable Energy and its Importance”	Hykon Industries PVT Ltd. Thrissur	AEEE	16 th January 2013	Er. Christo George,C , M.D Hykon Industries PVT Ltd.
An expert talk on “Fundamental Aspects of Power Electronics”		AEEE	1 st August 2013	Dr.M. Nandakumar, Associate
An expert talk on “Research Trends in Power ELelectronics”		AEEE	21 st August 2013	Dr. Dinesh Gopinath, Asst.Prof,CET,
1 day Workshop on Ansys Maxwell Software EM Package	Entuple Technologies Pvt. Ltd	AEEE	22 nd August 2013	Mr. Tijo Thomas, Entuple Technologies Pvt
A talk on “How to make difference in your Personal and Professional		AEEE	16 th November 2013	Dr. Chandra Mohan

New facilities Created

13. Wi-Fi connection is enabled with the speed of 10 Mbps covering the whole campus.
14. Volumes of books has been increased to 489 in Department Library
15. Hostel students are facilitated with internet up to 7.30 pm and library up to 7 pm
16. A separate staff room for faculty has been allocated in connection with the start of PG programme.

28. Student projects

Percentage of students who have done in-house projects including interdepartmental projects

Year	% of students
2012-13	
2013-14	92.1%
2014-2015	68.18

Percentage of students doing projects in collaboration with other universities / industry / institute

Year	% of students
2012-13	
2013-14	7.8%
2014-2015	31.8%

29. Awards / recognitions received at the national and international level by

Faculty : Nil

Doctoral / post doctoral fellows

Dr.Praveen R P has been awarded Ph.D. degree by Cochin University.

Students

Sl. No	Institution	Event	Students name	Prize/ Participat-ion	Month & year
1	Amal Jyothi College of Engineering, Kottayam.	ROBOWAR of Azure 12	Crystal Kuriakose	Certificate	Jan-2012
2	Govt. Engineering College Calicut	Paper Presentation Contest organized by KSEB	Vishnu Keloth	Certificate	Jan-2012
3	Amal Jyothi College of Engineering, Kottayam	ROBOWAR of Azure 12	Nelvin Babu, Jayesh C.Thomas, Jessal K.J and Fazil K	2nd prize	Jan-2012
4	Amal Jyothi College of Engineering, Kottayam	Participated in event ROBOWAR of Azure 12	Jeeswin Jose, Jeevan George, Dieto Davis, Joe Jose and Deepak Francis	Certificate	Jan-2012
5	KSEB ,Thrissur	Paper Presentation contest	Jishnu R	Certificate	Feb-2012
6	Govt.Engineering College,Thrissur.	Quiz Competition organised in connection with Second National Technological Congress-NATCON 2012	Chacko J.Chembukkavu	Certificate	Feb-2012
7	Nehru group of Institutions, Kerala.	Quiz event conducted by Nehru Science Innovation and Technology Expo(N-SITE) 2012	Chacko J.Chembukkavu	Certificate	Mar-2012

8	Royal College Of Engineering and Technology	INEITO 2012(Quiz Competition) conducted by VOICE	Chacko J.Chembukkavu	Certificate	Mar-2012
9	College of Engineering, TVM	Three day workshop on MATLAB	Anagha Philip Antony,Jishnu R,Amrutha Paul	Certificate	Jun-2012
10	FISAT,Angamaly	All kerala Student congress Latex Workshop	Jishnu R	Certificate	Jul-2012
11	Sree Narayana Guru Institute of Science and Technology, Paravoor	NSS State level training programme for volunteer secretaries	Anagha Philip Antony	Certificate	Jul-2012
12	Syed Ammal Engineering college,Ramanathapuram, Tamilnadu	IEEE International conference on Advanced communication, control and Computing Technologies (ICACCCT 2012)	Ajeesh K.P, Ashish R,Mary Helna Muttath, chandran N.K, Sreedevi C.R, Praveen R.P	Certificate	Aug-2012
13	TKM College of Engineering,Kollam	IEEE Treadstone organized PIC Micro controller workshop	Jishnu R	Certificate	Sep-2012
14	Govt. Model Engineering College, Cochin	Event Papyrus of Ani held in connection with Litmus 7 Excel 2012	Jishnu.R	Certificate	Sep-2012
15	BSNL,TCR	Industrial visit	Roshna N.K,Mnisha Emmanuel	Certificate	Sep-2012
16	Marine Drive and Madakathara Substation Thrissur	Industrial visit at 66/11kv Gas Insulated Switchgear Substation	Jane Xavier,Hridhya Kurian , Rincy Sunny & Ancy Joseph	Certificate	Sep-2012
17	Govt.Engineering College,Thrissur	Quiz Competition held in connection with BSNL day/week celebrations	Chacko J.Chembukkavu	3rd Prize	Sep-2012
18	Govt.Engineering College,Thrissur	Vaibhava- Quiz Competition	Chacko J.Chembukkavu	Certificate	Sep-2012
19	Govt. Engineering College Thrissur	Paper Presentation contest-DYUTHI -12	Jishnu R	Certificate	Oct-2012

20	TELK, Angamaly	Industrial visit	Anoop M P, Akhil Raj , Anoop vadakkan , Jomin K P, Lijo T O, Jishnu R ,Anju U D, Manisha Emmanuel, Anagha Philip Antony	Certificate	Dec-2012
21	MES Engineering college, Kuttipuram	Paper Presentation Contest	Jishnu R	Certificate	Dec-2012
2013					
1	MEA college of Engineering, Perinthalmanna	IEEE LINK CAMP and FACE to FACE MEET	Anagha Philip Antony & Jishnu R	Certificate	Jan-2013.
2	Collge of Engineering, Chengannur	Workshop on “web development” hosted by ‘SATVIKA 2013	Roshna N.K	Certificate	Jan-2013.
3	Sreepathy Institute of Management and Technology, Vavannur	Project Exotica Panchajanya 2013	Savithry.T.S , Hasna.V.K and Amrutha Mohan	2nd prize	Feb-2013.
4	Adi Shankara Institute of Science and Technology, Kalady	TREGEN13-Hub Meet	Jishnu R	Certificate	Feb-2013.
5	College of Engineering, Munna r	IEEE Hub event- KAIGEN-13	Jishnu R	Certificate	Mar-2013.
6	KSEB, THRISSUR	State Level Seminar Competition	Hasna.V.K and Savithry T S	1st Prize	Mar-2013.
7	Sreebuddha college of Engineering for women, Pathanamthitta.	EMPAQUE (paper presentation) of EKATHARA 13	Jishnu R	1st Prize	Apr-2013.
8	Dr.MGR Educational and Research Institute	Microsoft student partners Boot camp	Jishnu R	Certificate	Jun 2013.
9	College of Engineering, Chengannur	Student Ethics competition	Anagha Philip Antony, Jishnu R, Roshna	Certificate	Aug-2013.
10	Vimal Jyothi Engineering College, Kannur	All Kerala IEEE congress and took part in training programme on ‘CYOBRG’	Anagha Philip Antony, Jishnu R, Amrutha Paul, Akhil Raj	Certificate	Aug-2013.

11	BSNL, TCR	Industrial visit	Anju U D,Jishnu R, Manisha Emmanuel,Jerry & Roshna	Certificate	Sep- 2013.
12	Govt.Engineering College,Thrissur	Crisis & Management team volunteer & Energy auditing Workshop Organized by KITES-2013	Jishnu R	Certificate	Oct- 2013.
13	Thriprayar	NSS District level training programme for volunteer secretaries	Anagha Philip Antony	Certificate	Dec- 2013.
2014					
1	Power grid Co- Operation of India, Pallikkara and NTPC ,Kayamkulam.	Industrial Visit	Jane Xavier,Hridhya Kurian,Rincy Sunny , Ancy Joseph,	Certificate	Jan- 2014
2	Achuthamenon Arts College	Calicut University DZONE Western group song	Lijo T O	3rd prize	Jan- 2014
3	KSEB Engineers Association and power society (District Level).	5th Series Seminar Competition conducted by KSEB	Anagha Philip , Jishnu R	1st prize	Jan- 2014
4	NSS college of Engineering, Palakkad	National conference EEM-2014	Anagha Philip Antony,Jomin, Rejin George	Certificate	Jan- 2014
5	KSEB Engineers Association and power society (State Level).	5th Series Seminar Competition conducted by KSEB	Anagha Philip ,Jishnu R	Certificate	Feb- 2014.
6	Calicut university, Malappuram	Interzone level competition in mono act	Stephy Akkara	1st prize	May- 2014
7	Calicut university, Malappuram	D-zone level competition in mono act	Stephy Akkara	2 nd prize	Feb- 2014
8	GEC,Chenganur	USER experience	Adhipa K R Judy Jose A Revathy Ganesh	Certificate	Jun- 2014

9	RIT Kottayam	MATLAB workshops conducted by IEEE	Antony J Manjila Anu Anto David Jinto Jithesh V R Mahesh	Certificate	Aug-2014
10	GEC,Chenganur	USER experience	Niya Kochumon A Revathy Ganesh	Certificate	Jun-2014
11	RIT Kottayam	Ethical hausing workshops	Noble Antony Ranjith K	Certificate	May-2014
12	RIT Kottayam	KITES Workshops conducted by IEEE	Noble Antony Ranjith K	Certificate	July-2014
13	RIT Kottayam	MATLAB workshops conducted by IEEE	Rosmi Vishnu Vijay Revathy V Sreelakshmi V Jyothi Lakshmi	Certificate	Aug-2014

30. Seminars/ Conferences/Workshops organized and the source of funding (national / international) with details of outstanding participants, if any.

Academic Year 2013-2014						
Module Description	Any other contributory institute /industry	Developed /Organized by	Duration	Resource Person	Target audience	Usage & Citation etc.
Training on ANSYS MAXWELL RMXPERT Software Package	Entuple Technologies Pvt. Ltd.	AEEE	22 nd -23 rd January 2014	Mr. Tijo Thomas, Entuple Technologies Pvt. Ltd.	S8 Students	curriculum
2 day workshop on MATLAB/SIMULINK Application to Electrical	ISTE	AEEE	12 th -13 th March 2014	Mr. AkhilBalakrishnan Asst. Professor, JECC	S6 Students	curriculum
2 Day workshop on FPGA based Hardware Implementation		AEEE	25 th -26 th March 2014	Prof. Lyla B. Das, Professor NIT Calicut	S8 Students	curriculum

Academic Year 2014-2015						
Module Description	Any other contributory institute	Developed /Organized by	Duration	Resource Person	Target audience	Usage & Citation etc.
3 day Workshop on Ansys Maxwell SIMPLORER & PE XPRT	Entuple Technologies Pvt. Ltd.	AEEE	30 th July-1 st August 2014	Mr. Tijo Thomas, Entuple Technologies Pvt. Ltd	S7 Students	curriculum
Two day workshop on ROBOTICS	ISTE	AEEE	9 th -10 th October 2014	Prof. Umesh, RIT Kottayam	S5 Students	curriculum

31. Code of ethics for research followed by the departments

The department intends to respond to a changing climate of research with the intent of:

- (i) showing due respect to all who are part of the research,
- (ii) respecting the values of truth, fairness and open democracy,
- (iii) upholding the integrity of a discipline, and
- (iv) carrying out the mode of enquiry of research.

Code of Ethics for Research should strive to maintain:

- (i) the integrity of social/linguistic/medical/biological enquiry
- (ii) the freedom to research
- (iii) the freedom to publish and disseminate the results of their research

32. Student profile programme-wise: Name of the Applications Selected Pass percentage Programme received Male Female Male Female (refer to question no. 4)

Programme	Year of admission	No.of students admitted	No. of students passed
B-Tech	2009-10	59	54
B-Tech	2010-11	64	59
B-Tech	2011-12	44	28

33. Diversity of students

Year of Admission	Boys	Girls
2014-15	56	13
2013-14	42	22
2012-13	24	32

34. How many students have cleared Civil Services and Defense Services examinations, NET, SET, GATE and other competitive examinations? Give details category-wise.

Exam Qualified	Year	Name of Student
GATE	2013	Jithin

35. Student progression Student progression Percentage against enrolled

UG to PG

PG to M.Phil.

PG to Ph.D.

Ph.D. to Post-Doctoral

Employed

Campus selection

Other than campus recruitment

Entrepreneurs

36. Diversity of staff Percentage of faculty who are graduates of the same university from other universities within the State from universities from other States from universities outside the country

Percentage of faculty who are graduates of the same university	Percentage of faculty from other universities within the State	Percentage of faculty from universities from other States	Percentage of faculty from universities outside the country
63.1%	15.7%	21.05%	0

37. Number of faculty who were awarded M.Phil., Ph.D., D.Sc. and D.Litt. during the assessment period

Degree awarded	Year	Name of faculty
Ph.D	2013	Dr.Praveen R p
M-Tech	2012	Mr.Jenson Jose
M-Tech	2012	Ms.Della David
M-Tech	2013	Ms.Saritha P

38. Present details of departmental infrastructural facilities with regard to a) Library b) Internet facilities for staff and students c) Total number of class rooms NAAC for Quality and Excellence in Higher Education 99 Manual for Self-study Universities d) Class rooms with ICT facility e) Students' laboratories f) Research laboratories

Room Description	Usage	Shared / Exclusive	Capacity	Rooms Equipped with PC, Internet, book rack, meeting space etc.
Class room ADM 305 (S1&S2)	Class room for I year students	Exclusive	70 sq.mts	Black board, Provision for OHP & LCD, adequate number of fans and tube lights, benches, faculty table and chair
Class room WAB 104 (S3&S4)	Class room for II year students	Exclusive	81.6 sq.mts	Black board, Provision for OHP & LCD projectors , adequate number of fans and tube lights, benches, faculty table and chair
Class room WAB 105 (S5&S6)	Class room for III year students	Exclusive	81.6 sq.mts	Black board, LCD projector ,adequate number of fans and tube lights, benches, faculty table and chair
Class room WAB 106 (S7&S8)	Class room for IV year students	Exclusive	81.6 sq.mts	Black board, LCD projector, adequate number of fans and tube lights, benches, faculty table and chair
Tutorial Room 103	Tutorial	Exclusive	37 sq.mts	Chairs, Black board, adequate number of fans and tube lights
Seminar hall WAB 310	Seminar	Exclusive	136 sq.mts	Provision for OHP, LCD projector, CPU, adequate number of fans and tube lights, Black board, 66 chairs
Department library	Library	Exclusive	15.33 sq.mts	Desk and benches accommodating 15 students, adequate number of fans and tubelights, technical books, project reports, general knowledge books

Drawing Hall WAB311	Drawing	Shared	137 sq.mts	70 numbers of drawing boards, Black board , Provision for LCD, adequate number of fans and tube lights
Discussion/ counseling Room	For discussion and counseling	Shared	5 (30m ²)	Sufficient number of tables and chairs are arranged
HOD Cabin Department Office	HOD Cabin and EEE Department Office	Exclusive	32 sq.mts	Computer with internet and printer, adequate number of fans and tubelights, Almirahs, Notice Board and Display Board

Name of the Lab	Exclusive use/ Shared ?	Space, Number of Students	Number of experiments (curriculum + advanced)	Quality	Faculty In Charge, Technician	Name of the course for which lab is used	Lab manuals
Electrical Machine Lab	Exclusive	183.6sq.m 30 students	(12+2)-2 nd Year 22-3 rd Year	Excellent	Ms.Anu Sunny, Mr.Davis K.T	S3-ECE S3-ME S5-EEE S6-EEE	Available
Advance Electrical Engineering Lab	Exclusive	122.4sq.m 30students	10+5	Excellent	Ms.Kavitha Bhaskar, Mr.Majeendran K	S7- EEE	Available
Power Electronics Lab	Exclusive	79sq.m	12+2	Excellent	Ms.Della David	S7- EEE	Available
Electronics Lab	Exclusive	91.8sq.m 30students	(13+2) -2 nd Year (10+2)-3 rd Year	Excellent	Mr. Akhil A Balakrishnan Mr Maieendran	S3-EEE S5-EEE	Available

Electrical Measurement Lab	Exclusive	122sq.m 30students	(24+4) 2 nd Year	Excellent	Ms.Saritha P Mr. Alistar	S3- EEE S4-EEE	Available
Electrical Workshop	Exclusive	81.8sq.m 30students	11	Excellent	Ms. Soumya C Mr.Raghavan N K	S1&S2 for all branches	Available

39. List of doctoral, post-doctoral students and Research Associates a) from the host institution/university b) from other institutions/universities : Nil

40. Number of post graduate students getting financial assistance from the university.

Year	No of students
2012-13	8
2013-14	6
2014-15	1

41. Was any need assessment exercise undertaken before the development of new programme(s)? If so, highlight the methodology. : Nil

42. Does the department obtain feedback from

a. faculty on curriculum as well as teaching-learning-evaluation? If yes, how does the department utilize the feedback? Nil

b. students on staff, curriculum and teaching-learning-evaluation and how does the department utilize the feedback?

The students are asked to give unbiased and honest feedback. The process is transparent and does not disclose student identity.

The students evaluate the teachers in the following context:

- Engage lectures regularly on time
- Overall appearance and personal Communication Skills
- Explanation
- Use of supplementary methods
- Overall appearance and personal Communication Skills
- Explanation
- Use of supplementary methods
- Readiness to address student doubts
- Availability
- Use of black board
- Relationship with students

After collecting the online feedback from the students, the evaluation of the teacher is done by Quality Improvement Cell and teachers are evaluated based on the overall performance in the following categories:

Evaluation	Grade	Grade points
Excellent	A	5
Very Good	B	4
Good	C	3
Fair	D	2
Satisfactory	E	1

The complete report of all the Departments reaches Principal and the report of respective department is submitted to their respective Head of Department. The teachers with other grades introspect themselves and improve in the concerned areas.

A class committee meeting is conducted twice during each semester including the Head of Department, 6 students representing the class and the concerned faculties on each subject. The students and the faculties can raise their concern on various issues related academic and general matters.

Verbal feedback is collected from the students during lectures and practical hours and the same is discussed with concerned head and necessary corrective action is initiated. Head of Department discusses the feedback with the concerned faculty for improvement.

The feedback is collected two times, once at mid semester and also at the end of the semester. About 95% of students participate and it is done on-line.

Comments are considered positively. Weaknesses with regard to teaching are expected to be rectified by the faculty with the sole objective of maintaining good academic practices and standards.

Basis of reward/corrective measures, if any

Based on the feedback collected from the students on the faculty and the result analysis, the following reward /corrective measures are taken up in the Institute.

Rewards

Appreciation letter by the HOD for those who produce 100% results in University Examinations.

Corrective measures

- Counselling the faculty who scored less than 3.5 points on 5 – point scale
- Sponsoring for refresher courses to improve the subject knowledge
- Organizing workshops on teaching methodologies
- Arranging specialized lectures by eminent faculty
- Making available e-lectures sourced from internet

c. alumni and employers on the programmes offered and how does the department utilize the feedback? : YES

The students are asked to give unbiased and honest feedback. The process is transparent and does not disclose student identity.

The students evaluate the teachers in the following context:

- Engage lectures regularly on time
- Overall appearance and personal Communication Skills
- Explanation
- Use of supplementary methods
- Overall appearance and personal Communication Skills
- Explanation
- Use of supplementary methods
- Readiness to address student doubts
- Availability
- Use of black board
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- Sponsoring for refresher courses to improve the subject knowledge
- Organizing workshops on teaching methodologies
- Arranging specialized lectures by eminent faculty
- Making available e-lectures sourced from internet

43. List the distinguished alumni of the department (maximum 10)

Sl No.	Name	Affiliation
1	Mr.Robin K Sebastain	HAL
2	Dr.Gopakumar	Asst. Professor
3	Mr.Charles S K	Asst Engineer KSEB
4	Mr.Abdul Fatha	DEWA,Dubai
5	Mr.Hari	L & T
6	Mr.Aravind K P	Asst Manager SIB

44. Give details of student enrichment programmes (special lectures / workshops / seminar) involving external experts.

2) **ISTE- Indian Society for Technical Education** – ISTE Student chapter started the activities in the year 2012. The chapter had organized the following.

Academic Year	Event	Associated with Professional Chapters /Industry	Date	Organizer / Resource Persons
2012-2013	Industrial visit BSNL, Thrissur	IEEE	16 th October 2012	Ms.RESHMA RAJ,Asst Prof, JECC,Thrissur
	National Level Workshop- AZIKSA	IEEE	8 th and 9 th March 2013	Mrs. Mini Ulanat (IEEE SAC, WIE Vice Chair – Kerala Section)
2013-2014	Skill Development Programme - workshop PCB design and fabrication	IEEE	30 th ,31 st August and 1 st September 2013	Mr Karunakaran C K, Mr Vineeth V V , Dr Praveen R P, Ms Sreethumol M V.
	PES Quiz 2013 State Level Quiz for First year Engg. Students	IEEE	11 th September 2013	Ms Reshma Raj C, Asst Prof, JECC,Thrissur
	Full day Robotic Workshop	IEEE	11 th September 2013	Mr.Sunil Paul,IEEE SB Counsellor
	Expert talk	IEEE	13 th August 2013	Mr.Shahim Baker,Director Grey Techno labs,IEEE Kochi
	Expert talk on Entrepreneurship	IEEE	13 th august 2013	Rev.Fr.Roy Joseph Vadakkan
	2 Day National Level Technical Workshop AZIKSA on ‘PLC and Augmented Reality’	IEEE	7 th - 8 th of March 2014	Mr Sabarinath G Pillai (Secretary, IEEE Kerala Section)
2014-2015	Expert Talk on ‘The Modern aspects of Marketting’	IEEE	3 rd September 2014	Fr Roy Joseph Vadakkan (AP/MBA Project Manager, JECC)
	Two day workshop on ROBOTICS	ISTE	9 th -10 th October 2014	Prof.Umesh, RIT Kottayam Mr.Akhil R ECIAN Ltd.
	Two Day Workshop on Embedded system with Arduino Microcontroller	IEEE	10 th – 11 th October 2014	Mr Tijomon Gregory, IIT Delhi and Robosapiens Pvt Ltd

	Two day workshop ROBINO	ISTE	16 th – 17 th October 2014	Mr Jinesh K Jose, Asst Professor in ECE
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Organization of paper contest, Design contest etc. and achievements

Department of EEE conducts every year Technical Events in which some events are arranged for Electrical Engineering students from JECC as well as other colleges and prizes are awarded:

- Paper Presentation
- Robowar
- Line Follower

In the Academic year 2013-2014, a new Event, **Ethical Master Mind** was launched to evaluate the Ethical values in students.

Sl No	Name of the Event	Date of the Event	Venue	Participants	Remarks
1	THARANG 2012 V.2 - Robo War	6/3/2013	JECC Auditorium	B.Tech students including External Participants	Cash Prizes worth 25000/-
2	Line follower	6/3/2013	JECC Auditorium	B.Tech students including External Participants	Cash Prizes worth 25000/-
3	Paper Presentation contest	24/1/2014	JECC- Insight Seminar Hall	Both B.Tech & M.Tech students including External Participants	Cash Prizes worth 8000/-. Prizes Bagged by JECC M.Tech Power Electronics
4	Robo War	25/1/2014	JECC Auditorium	B.Tech students including External Participants	Cash Prizes worth 25000/-

Publication of Technical Magazines, Newsletters etc.

The Department of EEE has come out with a Newsletter highlighting the achievements, programmes organized and also with some latest information and updates in the current affairs of their respective fields in the Year 2012. The Department of EEE has been released three volumes of Newsletter till now.

DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING
NEWS LETTER
 Volume-03, September 2014
JYOTHI ENGINEERING COLLEGE, CHERUTHURUTHY, THRISSUR

ISTE- SRM Sponsored Short Term Training Programme

An ISTE- SRM Sponsored Short Term Training Programme on , "Power System Control Using Power Electronics " was conducted under the Department of EEE from 16th-21st June 2014. Ms. Reshma Raj, Ms. Della David, Ms. Soumya C, Ms. Aswathy Rajan, Ms. Renjini G and Ms. Aathira X. Y were the in house participants for the same.




As a part of ISTE-SRM sponsored STTP, a field visit to Kanjikode Wind Farm was organized. The participants of the STTP were accompanied by Dr. Praveen R. P (HOD, EEE), Mr. Vineeth V. V, Ms. Anu Sunny, Mr. Anees V. P and Mr. Akhil A Balakrishnan.



M.Tech 3rd Batch-Inauguration



AEEE-2014
The activities of AEEE for the year 2014-15 was inaugurated by Dr. X. Geetha, Principal, JSS Engineering College on 26th Aug 2014 and interacted with PG and UG students on the topic " Association Activities- To improve Soft and Hard skills".



Mrs. Reshma Raj, AP, EEE Dept. was given the charge of HOD with effect from 8/8/2014.



Mrs. Anu Sunny, AP, EEE Dept. was given the charge of PG Coordinator, M.Tech in Power Electronics with effect from 8/8/14.



Orientation program for M.Tech 1st year Students (2014 Adm. Batch)



26th KERALA SCIENCE CONGRESS



2 day workshop on FPGA Based Hardware Implementation was conducted for PG students on 25th and 26th March 2014 by the Dept. of EEE under the auspices of AEEE. Resource Person: Prof. Lyla. S. Das, NIT Calicut



14 PG students and 3 faculty members including Dr. Praveen R. P (Prof and HOD), Ms. Reshma Raj, C (PG Coordinator) and Ms. Della David (PG Advisor) attended 26th All Kerala Science Congress at Wayanad from 28-30 January 2014. 14 Technical papers (9 Oral and 5 Poster) of PG's Power Electronics were presented during the same.



ISTE JECC Chapter sponsored workshop on "MATLAB/ Simulink Application to Electrical Engineering" was organized on 12th and 13th March 2014 under the Department of EEE. Resource Persons: Mr. Jimu X. T, HOD, EEE, IES College of Engineer ring, Chirappilly, Ms. Ashni Eliza George, AP, EEE Dept., JECC, Mr. Akhil A Balakrishnan, AP, EEE Dept., JECC, Mr. Kapilada, AP, NET Dept., JECC.



Dept. News Letter 01/03

Entrepreneurship Activities, product designs and innovations

Entrepreneurship Development Cell (EDC) has been functional in the college since year 2009 to inculcate entrepreneurial orientation among students through formal and non-formal programmes. EDC also aims to enhance analytical skills and general awareness of students and to promote skills of interaction in groups & leadership styles through conducting workshops on entrepreneurial Development. EDC also make train students to work and make employability to him or become JOB

CREATORS. The students of the Department of EEE are actively participating in the programmes conducted by the Cell.

The following are the few events conducted by EDC during the current academic year.

- An invited talk on "Importance of Entrepreneurship in campus" on 28th March 2014 in Decennial Hall by Alex P George, CEO, ALCO FASTENERS, Visiting Professor @ IIM, Kozhikode & an alumnus of IIT/IIM was conducted.
- An Invited talk by the senior Director from NASSCOM Mr. Purushothaman was held.
- Entrepreneurship Development Cell (EDC) of Jyothi Engineering College, organized Entrepreneurship Day Celebration and Inauguration on 23/10/2014, with the launch of website & logo release. The Guest of the day were Ms. Deena Venugopal (Founder of Anabytes) and Mr. Rajeev Krish (Founder and Director, WAUM Team).

45. List the teaching methods adopted by the faculty for different programmes.

- Chalk & talk
- Student assignment
- Web resources
- Lcd/smart boards
- Student seminars
- Add-on courses

46. How does the department ensure that programme objectives are constantly met and learning outcomes are monitored?

Assessment of teaching learning process:

The assessment by the students for each theory and laboratory courses is evaluated on 5 point scale indirectly by collecting feedback evaluation form about the faculty by the students twice in a semester. Based on the feedback actions are taken.

Evaluation process (Examinations/Tests/Assignments)

The assessments of students are carried out by conducting two series tests. As per the regulation of the university 27 marks are allotted for internal evaluation 3 marks allotted for attendance. Internal marks are allotted based on the average performance in tests and assignments. The students who performed poorly in the tests are considered as slow learners and special remedial classes and examinations are conducted for them. Student's performance is found to be improving. Assignments are given to the students on specific topics to encourage the practice of referring to the

journals, internet and reference books with the facilities provided by the college such as department libraries, e-journals and internet.

Based on the theoretical and practical knowledge the students gain in basic sciences, mathematics and core areas, they are able to carry out in-house projects, leading to product development related to Electrical Engineering. Frequent reviews are conducted by review committee to assess their progress and guide them through the whole process. Internal marks are allotted based on the quality of the project, plan methodologies, execution, presentation and scientific relevance. Viva-voce examination is conducted at the end of the semester by the university.

Continuous Improvement

- Good number of guest lectures by eminent speakers from Institutions and Industries.
- The research and innovative skills of the students are honed through external and internal project works which are carried during final and pre final years.
- Participation in co-curricular activities like Techfests, workshops and seminars.
- The placements in various industries are good indicators that our students are employable in Electrical and allied fields.
- Number of student volunteers involved in social service through NSS and Community Development Programmes reflect their sense of responsibility and commitment to serve the society.

47. Highlight the participation of students and faculty in extension activities.

1. Blood Donors Forum
2. Women Development Cell
3. Natura Environment Club

48. Give details of “beyond syllabus scholarly activities” of the department.

A Central library, digital library and department library with excellent collection of reference books, text books are available. The central library remains open after the normal working hours so that students can do extra reading. The students can also refer to advanced text books suggested by the teacher, apart from the prescribed text and reference books listed in the syllabus.

The laboratories also remain open after working hours on request by students so they can improve their practical skills.

The institution conducts Techfest "Tharang" every year where the students can get an environment for self learning through paper presentation, project presentation. They also develop their leadership qualities and learn to work as part of team.

A computer centre with internet facility remains open after working hours in the evening. The day scholars and hostel students can make use of this facility. A number of e-journals are available in the digital library for the students.

Facilities for self learning

Facilities Available: Digital Library, Department Library, E learning Resources, Central Computing Facilities, Department Labs, Workshops and Seminars and Technical Events

Category of International Journals in central library

Elsevier Advanced Technology, North-Holland, Academic Press and Pergamon

List of Journals in central library

Sl. No.	List of Journals/Magazines
1	CSI
2	Dataquest
3	Digit
4	Electrical India
5	Electronics Bazaar
6	Electronics For You (w/CD)
7	Electronics Maker
8	Embedded For You
9	International Journal of Data Mining and Emerging Technologies
10	International Journal of Applied Research on Information Technology and Computing (IJARITAC)
11	Journal of Entrepreneurship
12	Journal of the Institution of Engineers -Series A
18	Journal on Electronics Engineering
19	Linux For You (with PRO+CD)
20	Outlook
21	PC Quest
22	Research Journal of Engineering and Technology (Online)
23	Resonance
24	Telecommunications
25	The Indian Journal of Technical Education
26	The Week
27	Time
28	University News

Contents of the self-learning modules:

- Paper presentation in seminars
- Group discussion & Role Play / Peer discussion
- Project related information- Record books
- Net browsing on education related topics
- CDs supplied along with text books
- CDs supplied along with journals
- Different Web sites for improving communication skills
- GATE material from Brilliant, GK Publishers
- GRE material for higher education abroad
- TOEFL CDs for language test for higher education abroad
- CAT/MAT entrance exam CDs
- Old question papers – hard and soft copies
- Competitive exam and subject fundamental related information
- Audio Visual materials
- Training classes in aptitude and basic subjects
- Solved Model Questions and multiple-choice-questions are available.
- Additional courses available for the 1st, 2nd, 3rd and 4th B.Tech programs.

Motivation

- Students are encouraged to utilize the self-learning modules available in the institute so as to develop their understanding on various emerging topics, come out with innovative ideas, prepare research papers and present them in various conferences and project exhibitions.
- Students are provided with internet facility in the Internet Lab in order to fetch the required information.
- Departmental Libraries are maintained by the respective departments for easy and quick access.
- Students are given assignments on advanced topics.
- The students are encouraged by faculty and by providing financial assistance for registration and travel for various technical activities.
- Staff members guide students for such activities.

- Through this programme, students are trained to achieve technical skills as per the expectation of various industries.
- Students are guided on advanced topics and also in respect of the following:
 - Contents and explanations
 - Appropriate additional topics downloaded from internet
 - Material supplied by experts
 - Mini Projects
 - Assignments

49. State whether the programme/ department is accredited/ graded by other agencies? If yes, give details.: No

50. Briefly highlight the contributions of the department in generating new knowledge, basic or applied.

The department conducts community development programmes for the benefit of society. The department is also arranging various workshops and add on courses for the skill development in students.

51. Detail five major Strengths, Weaknesses, Opportunities and Challenges (SWOC) of the department.

STRENGTH

- Adequate no. of Young dynamic qualified and highly motivated faculty
- State of the art facilities and lab
- EEE is the one of the important core branch among the Engineering stream.
- Post Graduate program in Power Electronics.

WEAKNESS

- Require a lot of financial resource and expertise acquisition.
- Research activity taking place in the department is low.
- Opportunities in the power sector are not up to the expected level.
- Little autonomy in opting a syllabus that equip the students for competitive job market.
- Coping with the fast changing advancement in the field is a challenge.

OPPORTUNITIES

- To start maximum M.Tech. program in need with the industry.
- To double the student intake

CONSTRAINTS

- Quality of Students intake.
- Low percentage of result.
- Poor campus placement.

52. Future plans of the department.

- To start industry consultancy
- To have a periodic community development program to train the unemployed youngsters and also to educate the people in better energy Utilization



DEPARTMENT OF MECHANICAL ENGINEERING

1. Name of the Department: Department of Mechanical Engineering

2. Year of establishment: 2004

3. Is the Department part of a School/Faculty of the university? No

4. Names of programmes offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., D.Sc. D.Litt. etc.): UG

Courses offered

Sl No.	Courses offered	Intake	When started	Specialization
1	B. Tech	60	2004	Mechanical Engineering

5. Interdisciplinary programmes and departments involved

Sl No.	Names of Interdisciplinary courses	Department involved
1	Engineering Mathematics(I,II,III,IV)	Basic Science & Humanities
2	Engineering Physics	Basic Science & Humanities
3	Engineering Chemistry	Basic Science & Humanities
4	Engineering Mechanics	Civil Engineering
5	Basics of Civil Engineering	Civil Engineering
6	Basics of Electronics and Communication Engineering	Electronics and Communication Engineering
7	Basics of Electrical Engineering	Electrical Engineering
8	Computer Program in C	Computer Science Engineering
9	Humanities and Communication Skills	Basic Science & Humanities
10	Professional Ethics	Basic Science & Humanities
11	Organizational Behavior	Basic Science & Humanities
12	Engineering Economics	Basic Science & Humanities

6. Courses in collaboration with other universities, industries, foreign institutions, etc.

Sl. No.	Name of Industry/Organization	Activities through the MoU
	NIL	

7. Details of programmes discontinued, if any, with reasons: NIL

8. Examination System: Annual/Semester/Trimester/Choice Based Credit System: Semester

B. Tech programme	
I Year	Annual
II Year	Semester
III Year	Semester
IV Year	Semester

9. Participation of the department in the courses offered by other departments

SI No.	Courses name	Offered to (Dept.)
1	Basics of Mechanical Engineering	Civil Engineering
2	Basics of Mechanical Engineering	Electrical & Electronics Engg
3	Mechanical Engineering	Electrical & Electronics Engg
4	Basics of Mechanical Engineering	Computer Science Engg.
5	Basics of Mechanical Engineering	Electronics & Communication Engg.
6	Mechanical Engg Lab	Civil Engineering
7	Mechanical Engg Lab	Electrical Engineering

10. Number of teaching posts sanctioned, filled and actual (Professors/Associate Professors/Asst. Professors/others)

	Sanctioned	Filled
Professors	2	2
Associate Professors	1	1
Assistant Professors	21	21

11. Faculty profile with name, qualification, designation, area of specialization, experience

(D.Sc./ D.Litt. /Ph.D. / M. Phil. etc.,)

SI No.	Name	Qualification	Designation	Specialization	Years of experience
1.	Prof. K. C John	M. Sc Engg	Professor & HOD	Production Engineering	42 years
2.	Prof. K. Varghese Job	M.Tech	Professor	Maintenance Engg & Management	33
3.	Mr. Biju C. V	M.Tech	Asso. Professor	Manufacturing	15
4.	Mr. Manoj Kumar V. K	M.Tech	Asst. Professor	Technology Management	12
5.	Mr. Praveen Raj	M.Tech	Asst. Professor	Manufacturing	8
6.	Ms. Christy. V. Vazhappilly	M.Tech	Asst. Professor	CAD/CAM	5
7	Mr. Melvinraj C. R	M.Tech	Asst Professor	Thermal Systems	5
8	Mr. Nikhil N. S	M. Tech	Asst Professor	Manufacturing	4
9	Mr. Suneeth Sukumaran	M.Tech	Asst Professor	Machine Design	3
10	Mr. Sreejith K	M.Tech	Asst Professor	Industrial Refrigeration & Cryogenic Engineering	3

11	Mr. Hareesh N. V	M.Tech	Asst Professor	Production Engineering	6
12	Mr. Nice Menachery	M.Tech	Asst Professor	Production & Industrial Engineering	3
13	Ms. Nisha Sherief	M.Tech	Asst Professor	Thermal Engineering	2
14	Mr. Tony Kottoor	M.Tech	Asst Professor	CAD/CAM	2
15	Mr. Sheik Aftab. S	M.Tech	Asst Professor	Manufacturing	2
16	Mr. Sukesh O. P	M.Tech	Asst Professor	Product Design & Manufacturing	2
17	Mr. Sajith U K	M.Tech	Asst Professor	Energy Engineering & Management	1
18	Mr. Cijil B John	M.Tech	Asst Professor	Internal Combustion Engineering	1
19	Mr. Ajith Krishnan R	M.Tech	Asst. Professor (On Study leave)	Energy System Analysis & Design	1
20	Mr. T. R Sreesastha Ram	M.Tech	Asst. Professor	Machine Design	1
21	Mr. Arun Raj A	M.Tech	Asst. Professor	I C Engines & Turbomachinery	1
22	Mr. Jithin K Kuriakose	M.Tech	Asst. Professor	Machine Design	1
23	Mr. Sreejith. A	M.Tech	Asst. Professor	I C Engines & Turbomachinery	-
24	Mr. Lippin Pauly	M.Tech.	Asst. Professor	I C Engines & Turbomachinery	-
25	Mr. K. Raghavan	B. Sc Engg.	Workshop Supt.	Mechanical	33

12. List of senior Visiting Fellows, adjunct faculty, Emeritus Professors: Nil

13. Percentage of classes taken by temporary faculty – programme-wise information: Nil

14. Programme-wise Student Teacher Ratio

STR is calculated as $= (x + y + z)/N1$

where, x = Number of students in 2nd year of the programme

y = Number of students in 3rd year of the programme

z = Number of students in 4th year of the programme

N1 = Total number of faculty members in the programme (by considering fractional load)

Year	X	Y	Z	X+Y+Z	N1	STR
CAY (2011-2012)	-	-	-	-	-	-
CAY (2012-2013)	110	64	58	232	16	14.5
CAY (2013-2014)	122	110	64	296	21	14.09
CAY (2014-2015)	138	122	110	370	25	14.8

15. Number of academic support staff (technical) and administrative staff: sanctioned, filled and actual

Year	Technical staff			Administrative staff		
	Sanctioned	Filled	Actual	-	-	-
2011-2012	NA	-	-	-	-	--
2012-2013	NA	-	-	-	-	-
2013-2014	NA	-	-	-	-	--
2014-2015	NA	-	-	-	-	-

16. Research thrust areas as recognized by major funding agencies

Nil

17. Number of faculty with ongoing projects from a) national b) international funding agencies and c) Total grants received. Give the names of the funding agencies, project title and grants received project-wise.

Nil. This being a self-supporting college, government funding agencies does not award grants of any sort in our favor.

18. Inter-institutional collaborative projects and associated grants received a) National collaboration b) International collaboration

Nil

19. Departmental projects funded by DST-FIST; UGC-SAP/CAS, DPE; DBT, ICSSR, AICTE, etc.; total grants received.

Nil. This being a self-supporting college, government funding agencies does not award grants of any sort in our favor

20. Research facility / centre with

state recognition Nil

national recognition Nil

international recognition Nil

21. Special research laboratories sponsored by / created by industry or corporate bodies

Nil

22. Publications:

* Number of papers published in peer reviewed journals (national / international)

* Monographs

* Chapters in Books

* Edited Books

* Books with ISBN with details of publishers

* Number listed in International Database (For e.g. Web of Science, Scopus, Humanities International Complete, Dare Database - International Social Sciences Directory, EBSCO host, etc.)

* Citation Index – range / average

* SNIP

* SJR

* Impact Factor – range / average

* h-index

a) Publication per faculty

Sl. No.	Name of The Faculty	No. of papers published	Details of papers published	International Journal(IJ), International Conference(IC), National Conference(NC)
1	Mr. SREEJITH K.	6	A) Experimental investigation of a solar powered Eco-Fridge B) Experimental Investigation Of Pedal Driven Hacksaws C) Experimental Investigation Of A Household Refrigerator Using Air-Cooled And Water-Cooled Condenser D) Experimental Investigation Of Pedal Powered Centrifugal Pump	a)IJ b)IJ c)IJ

			<p>E) Performance evaluation of a household refrigerator using CuO nanoparticle lubricant mixture and various other compressor oils with different condenser modes</p> <p>F) Experimental investigation of a domestic refrigerator having water cooled condenser using various compressor oils</p>	<p>d)IJ e)IJ f)IJ</p>
2	Mr. CHRISTY V VAZHAPPILLY	4	<p>A) Modeling and experimental analysis of generator in vapour absorption refrigeration system</p> <p>B) Experimental Analysis of vibration of ball bearing considering solid contaminants in lubricants</p> <p>C) Stress Analysis of Connecting Rod for Weight Reduction-A Review</p> <p>D) Solar Powered Heat Control System For Cars</p>	<p>a)IJ b)IJ c)IJ d)IJ</p>
3	Mr. TRIJO THARAYIL	1	A) Modeling and experimental analysis of generator in vapour absorption refrigeration system	a)IJ
4	Mr. MANOJ KUMAR V K	1	a) Experimental Analysis of vibration of ball bearing considering solid contaminants in lubricants	a)IJ
5	Mr. PRAVEEN RAJ	1	A) Experimental Analysis of vibration of ball bearing considering solid contaminants in lubricants	a)IJ
6	Mr. SUNEETH SUKUMARAN	2	<p>A) Design and Analysis of Kinetic Energy Recovery System in Bicycles</p> <p>B) Design and analysis of Metallic Thermal</p>	<p>a)IJ b)IJ</p>

			Protection Systems.	
7	Mr. MELVINRAJ C R	1	A) Comparative Study Of Heat Exchangers Using CFD	a)IJ
8	MS. NISHA SHERIEF	1	A) Experimental Investigation To Control Alcoholic Driving	a)IJ
9	Mr. Biju C V	2	A) Investigation into effect of particle impact damping (PID) on surface topography in Boring operation. B) Investigation of Mechanical Properties and Grain structure of 5xxx Al alloys under precised controlled annealed conditions	a)IJ b)IJ

23. Details of patents and income generated: Nil

24. Areas of consultancy and income generated : Nil

25. Faculty selected nationally / internationally to visit other laboratories / institutions / industries in India and abroad : Nil

26. Faculty serving in a) National committees b) International committees c) Editorial Boards d) any other (please specify)

xvi) **LMISTE-10**

xvii) **IE - 06**

27. Faculty recharging strategies (UGC, ASC, Refresher / orientation programs, workshops, training programs and similar programs).

2012- 2013- 14 No.'s

2013-2014- 31 No's

2014-2015- 20 No's

The following are the details of FDP/Seminar/Conferences attended by the faculty

FDP / CONFERENCES / SEMNAR LIST

2012-2013					
Sl. No	Name of Faculty	FPD Details	Venue	Duration	Role
1	LARRY LISTON	FDP on "Management Research Methodology"	NIT Calicut	1 Week (18-23/6/12)	Participant
2	CHRISTY V. V	Workshop on Statistical Analysis for Research	NIT Calicut	1 Day,6 Oct12	Participant
3		"Micro Machining Techniques"	Karunya University	1Day(4 Dec12)	Participant
4	SUNEETH SUKUMARAN	Workshop on Statistical Analysis for Research	NIT Calicut	2 Day,6 Oct12	Participant
5		"Micro Machining Techniques"	Karunya University	1Day(4 Dec12)	Participant
6		Short Course on Finite Element Method	IIT Hyderabad	3Days (19-21 Dec12)	Participant
7	PRAVEEN RAJ	Workshop on Statistical Analysis for Research	NIT Calicut	1 Day,6 Oct12	Participant
8		"Micro Machining Techniques"	Karunya University	1Day(4 Dec12)	Participant
9	C.KARUNAKARAN	Workshop on Statistical Analysis for Research	NIT Calicut	1 Day,6 Oct12	Participant
10		ISTE sponsored FDP-Design Testing and Launching of Satellite Systems	Jyothi Engineering College	3 Days (6-8Feb13)	Resource Person

11	C.KARUNAKARAN	LAB VIEW	Jyothi Engineering College	1 Day (2-Jul-13)	Participant
12		Design Testing and Launching of Satellite Systems	Jyothi Engineering College	3 days (6 - 8 Feb-13)	Participant
13		Conference	Optimal solution for facility layout problem through improved genetic algorithm	1 day (25-Feb)	Participant
14	NICE MENACHERY	Conference	Investigation of Mechanical Properties and Grain structure of 5xxx Al alloys under precised controlled annealed conditions	1 day (19-1-2013)	Participant

2013-2014					
Sl.No	Name of Faculty	FPD Details	Venue	Duration	Role
1	Suneeth Sukumaran	Finite Element Method (FEM) with Hands on Altair Hyper works"	NIT JAIPUR	4Days(3-6Jun13)	Participant
2		Finite Element Analysis using Ansys	GEC, Thrissur	3Days(3-5Dec13)	Participant
3		FDP for improving professional excellence	Pariyaram	2 days(5-6 July'13)	Participant
4		Conference	Design and Analysis of 3000# 6"	2 days (2-3 May 14)	Participant

			Globe valve		
5	Nikhil N S	Workshop on Measurements during Metal Cutting	NSS College of Engg, Palakkad	2 Days (11-12 Oct13)	Participant
6		FDP for improving professional excellence	Pariyaram	2 days(5-6 July'13)	Participant
7	Sreejith K	Workshop on Measurements during Metal Cutting	NSS College of Engg, Palakkad	2 Days (11-12 Oct13)	Participant
8		FDP for improving professional excellence	Pariyaram	2 days(5-6 July'13)	Participant
9		Conference	Design and cost optimization of plate heat exchanger	1 day (26-Mar-14)	Participant
10		Conference	Experimental Investigation of a house hold Refrigerator	1 day (27-Mar-14)	Participant
11		Finite Element Analysis using Ansys	GEC, Thrissur	3Days(3-5Dec13)	Participant
12	C Karunakaran	Finite Element Method (FEM) with Hands on Altair Hyper works"	NIT JAIPUR	4Days(3-6Jun13)	Participant
13		IEEE- NIELIT Workshop on PCB Design	NIET Calicut	1 day(Aug. 14)	Participant
14		Recent Advances in Industrial Automtion & Embedded sy tems	St. Joseph (Palai)	4 days (10-14 June 14)	Participant
15		FDP for improving professional excellence	Pariyaram	2 days(5-6 July'13)	Participant

16	Nice Menachery	FDP for improving professional excellence	Pariyaram	2 days(5-6 July'13)	Participant
17		Conference	SAFETY BY DESIGN	2 days (16-17 Aug 13)	Participant
18		Conference	Six Stroke Engine With Pre-Cooled System For Low Consumption Of Fuel	2 days (2-3 May 2014)	Participant
19		Conference	Fuel Consumption Reduction system in 4 stroke engines	2 days (2-3 May 2014)	Participant
20	Biju C V	Conference	SAFETY BY DESIGN	2 days (16-17 Aug 13)	Participant
21	Manoj Kumar V K	FDP for improving professional excellence	Pariyaram	2 days(5-6 July'13)	Participant
22		Conference	Six Stroke Engine With Pre-Cooled System For Low Consumption Of Fuel	2 days (2-3 May 2014)	Participant
23	Larry Liston	FDP for improving professional excellence	Pariyaram	2 days(5-6 July'13)	Participant
24	Praveen Raj	FDP for improving professional excellence	Pariyaram	2 days(5-6 July'13)	Participant
25	Trijo Tharayil	FDP for improving professional excellence	Pariyaram	2 days(5-6 July'13)	Participant
26	Christy V Vazhappilly	FDP for improving professional excellence	Pariyaram	2 days(5-6 July'13)	Participant
27	Nisha Sherief	FDP for improving	Pariyaram	2 days(5-6 July'13)	Participant

		professional excellence			
28	Aju Thottungal	FDP for improving professional excellence	Pariyaram	2 days(5-6 July'13)	Participant
29	Deepthi K Krishnan	FDP for improving professional excellence	Pariyaram	2 days(5-6 July'13)	Participant
30	Sheik Afthab	FDP for improving professional excellence	Pariyaram	2 days(5-6 July'13)	Participant
31	Tony Kottoor	FDP for improving professional excellence	Pariyaram	2 days(5-6 July'13)	Participant

2014-2015					
Sl. No	Name of Faculty	FPD / Training Details	Venue	Duration	Role
1	C Karunakaran	"Hybrid Inorganic-Organic Nanocomposites for photonics, energy & electronic devices; Industrial applications"	IIT, Kharagpur	2 weeks (1-12 Sept'14)	Participant
2		Workshop on "Pressure Vessels Design"	JECC	3 days (14-16 Oct 14)	Participant
3		ISTE National Convention	College of Engg, Trivandrum	3 days (27-29 Nov 14)	Participant
4	Christy V Vazhappily	Workshop on "Pressure Vessels Design"	JECC	3 days (14-16 Oct 14)	Participant
5		ISTE National Convention	College of Engg, Trivandrum	3 days (27-29 Nov 14)	Participant
6	Suneeth Sukumaran	Workshop on "Pressure Vessels Design"	JECC	3 days (14-16 Oct 14)	Participant
7	Sheik Afthab	Workshop on "Pressure	JECC	3 days (14-16 Oct 14)	Participant

		Vessels Design”			
8	Manoj Kumar V K	Workshop on “Pressure Vessels Design”	JECC	3 days (14- 16 Oct 14)	Participant
9	Sukesh O.P	“Concepts of Coaching”	JECC	3 days (12- 14 Nov’14)	Participant
10		ISTE National Convention	College of Engg, Trivandrum	3 days (27- 29 Nov 14)	Participant
11	Sajith U.K	“Concepts of Coaching”	JECC	3 days (12- 14 Nov’14)	Participant
		STTP on “Computational Methods in Fluid Dynamics”	GEC, Thrissur	3 days (04- 06 March’15)	Participant
12	Cijil. B. John	“Concepts of Coaching”	JECC	3 days (12- 14 Nov’14)	Participant
13		ISTE National Convention	College of Engg, Trivandrum	3 days (27- 29 Nov 14)	Participant
14	Ajith Krishnan. R	“Concepts of Coaching”	JECC	3 days (12- 14 Nov’14)	Participant
15	T. R Sreesastha Ram	“Concepts of Coaching”	JECC	3 days (12- 14 Nov’14)	Participant
16	Arun Raj. A	“Concepts of Coaching”	JECC	3 days (12- 14 Nov’14)	Participant
17	Jithin. K. Kuriakose	“Concepts of Coaching”	JECC	3 days (12- 14 Nov’14)	Participant
18	Nice Menachery	ISTE National Convention	College of Engg, Trivandrum	3 days (27- 29 Nov 14)	Participant
19	Melvinraj C R	ISTE National Convention	College of Engg, Trivandrum	3 days (27- 29 Nov 14)	Participant
20	Nisha Sherief	STTP on “Computational Methods in Fluid Dynamics”	GEC, Thrissur	3 days (04- 06 March’15)	Participant

Guest Lectures

Guest lectures are arranged to plug the gap between Institute and Industry. This may transform and also help the staff to gather additional knowledge.

Module Description	Any other contributory institute/ industry	Developed /Organized by	Duration	Resource Person
A training program on “Design and fabrication of pressure vessels”	ASME	AMES	3 days	
An invited talk on “Nano fluids on heat transfer application”	-	AMES	1 day	Dr. L Godson, Professor, Karunya University
An expert talk on “Mechanical vibration”	-	AMES	1 day	Dr. P. Sam Paul, Professor, Karunya University
One day workshop on “Tool Engg and design”	-	AMES	1 day	Er. K.L.George, Retd. Engr. Keltron
“SIX SIGMA Course”	-	AMES	1 day (25-02-2014)	Mr. Premkumar

New facilities Created

17. Wi-Fi connection is enabled with the speed of 10 Mbps covering the whole campus.
18. Volumes of books have been increased to 473 in Department Library.
19. Hostel students are facilitated with internet up to 7.30 pm and library up to 7 pm.
20. A separate staff room for faculty has been allocated for accommodating the new staff.

28. Student projects

Percentage of students who have done in-house projects including interdepartmental projects:

➤ **B.Tech.**

1. 2014 -15 14.3%
2. 2013 – 14 NA
3. 2012 – 13 77 %

Percentage of students doing projects in collaboration with other universities / industry / institute:

➤ **B.Tech.**

- 2014 -15 85.7 %
- 2013 – 14 NA
- 2012 – 13 23 %

29. Awards / recognitions received at the national and international level by**Faculty:**

Nil

Doctoral / post doctoral fellows:

Nil

Students:

2015				
Sl. No.	Name of the Student / Faculty	Designation	Name of the Award	Awarding Organization
1	Neeraj Mp	Student	CERTIFICATE AWARDED	MES COLLEGE OF ENGINEERING
2	-Anup Nair - Jaik Jimmy - Amith Ignatious - Krishnaprasad -Jino Joshy	Students	CERTIFICATE AWARDED	IIT MADRAS
3	Neeraj Mp	Student	CERTIFICATE AWARDED	AMRITHA SCHOOL OF ENGINEERING, COIMBATORE
4	Neeraj Mp	Student	CERTIFICATE AWARDED	ALAMEEN COLLEGE OF ENGINEERING
5	Sachin M P	Student	First Prize – Judges’ Choice, Photography Contest	SAHRADHAYA COLLEGE OF ENGINEERING, KODAKARA
6	Vishnu	Student	First Prize – Audience Choice, Photography Contest	SAHRADHAYA COLLEGE OF ENGINEERING, KODAKARA
2014				
1	Mobin Pylan	Student	1 st prize	JYOTHI ENGG COLLEGE.
2	Shivin Victor	Student	3 rd PRIZE IN SILENT SCREAM THARANG 14	JYOTHI ENGG COLLEGE

3	Hari Krishnan K	Student	CERTIFICATE AWARDED (National Conference on Latest Trends in Mechanical Engineering)	NSS COLLEGE, PALAKKAD
4	Sajid Majeed	Student	1 ST PRIZE (PHOTOGRAPHY Competition)	SAHRDAYA ENGG COLLEGE
5	Betson Jose	Student	1 ST PRIZE (ELECTRO CAVE)	SAHRDAYA ENGG COLLEGE
2013				
1	Vinay Sankar	Student	Certificate awarded (IEEE WORKSHOP ALGORITHM)	VIMAL JYOTHI ENGG COLLEGE, KANNUR
2	Froid James	Student	Certificate awarded (PAPER PRESENTATION INTERNATIONAL CONFERENCE ON SAFETY BY DESIGN)	JAWAHARLAL COLLEGE OF TECHNOLOGY, LAKKIDI
3	Ajish Samuel	Student	Certificate awarded (DYUTHI, PAPER PRESENTATION)	GEC THRISSUR
4	Ajith Xavier	Student	Certificate awarded (DYUTHI, PAPER PRESENTATION)	GEC THRISSUR
5	Franco Antony	Student	1 ST PRIZE (PINACLE, DYUTHI)	GEC THRISSUR

30. Seminars/ Conferences/Workshops organized and the source of funding (national / international) with details of outstanding participants, if any.

Short term course

1. Certificate course on Design and fabrication of pressure vessels - ASME

Invited talk on

2. Nano fluids on heat transfer application by Dr. L Godson, Professor, Karunya University
3. Mechanical vibration, by Dr. P. Sam Paul, Professor, Karunya University

One day workshop on

“Tool Engineering and design”, Er. K.L.George, Retired Engineer, KELTRON

4. Six sigma course, Mr. Premkumar, 25/02/2014

Source of funding for each seminar: - Wholly financed by management

31. Code of ethics for research followed by the departments: Nil

32. Student profile programme-wise: Name of the Applications Selected Pass percentage Programme received Male Female Male Female (refer to question no. 4)

Sl. No.	Name of the Course/programme	Applications Received	Selected	Enrolled		Pass percentage
				*M	*F	
3.	B.Tech. (2014 Admission)	250	126	126	0	NA

33. Diversity of students:

Sl. No.	Name of Course	% of students from the same state	% of students from other states	% of students from abroad
40	B.Tech.	98.5%	1.5%	0
41	M.Tech.	0	0	0

34. How many students have cleared Civil Services and Defense Services examinations, NET, SET, GATE and other competitive examinations? Give details category-wise.

Sl. No.	Batch	Number of students who went for higher studies with valid qualifying scores/ranks
1.	2010-2014	7
2.	2009-2013	8

35. Student progression Percentage against enrolled UG to PG PG to M.Phil. PG to Ph.D. Ph.D. to Post-Doctoral Employed Campus selection Other than campus recruitment Entrepreneurs

Sl. No.	Student progression	Against % enrolled (2009-2013)	Against % enrolled (2010-2014)
1	UG to PG	$(8/58)*100=13.79$	$(7/64)*100=10.93$
2	PG to M.Phil.	NA	NA
3	PG to Ph.D.	NA	NA
4	PG to Post-Doctoral	NA	NA
5	Employed <ul style="list-style-type: none"> ➤ Campus selection ➤ Other than campus Recruitment 	$(0/58)*100=0$ $(26/58)*100=44.83$	$(7/64)*100=10.93$ $(25/64)*100=39.06$
6	Entrepreneurship/Self employment	No Data	No Data

36. Diversity of staff Percentage of faculty who are graduates of the same university/ from other universities within the State/ from universities from other States/ from universities outside the country:

Degree	Same university	From other universities within the State	From universities from other States	From universities outside the country
B.Tech.	48	36	16	-
M.Tech	29	42	29	-

37. Number of faculty who were awarded M.Phil., Ph.D., D.Sc. and D.Litt. during the assessment period: Nil

38. Present details of departmental infrastructural facilities with regard to:

a) Library

The department has a small Departmental Library

Sl. No.	Name of Item	No. of Copies
1.	Text Books	473
2.	Student Projects	123
3.	Student Seminar reports	550
4.	Digital Courseware	Nil

b) Internet facilities for staff and students:

Internet facilities are freely available for all staff and students.

c) Total number of class rooms NAAC for Quality and Excellence in Higher Education 99 Manual for Self-study Universities:

NA

d) Class rooms with ICT facility:

6 Classes

Details of Classrooms & facilities

Room Description	Usage	Shared/ Exclusive	Capacity	Rooms Equipped with PC, Internet, book rack, meeting space etc.
Class room ADM 307 (S1&S2)	Class room for I year students (Batch A)	Exclusive	70 sq.mts	Green board, Provision for OHP & LCD, adequate number of fans and tube lights, benches, faculty table and chair
Class room ADM 308 (S1&S2)	Class room for I year students (Batch B)	Exclusive	70 sq.mts	Green board, Provision for OHP & LCD, adequate number of fans and tube lights, benches, faculty table and chair
Class room WAB 205 (S3&S4)	Class room for II year students (Batch A)	Exclusive	81.6 sq. mts	Green board, Provision for OHP & LCD projectors , adequate number of fans and tube lights, benches, faculty table and chair
Class room (S3&S4)	Class room for II year students (Batch B)	Exclusive	81.6 sq. mts	Green board, Provision for OHP, adequate number of fans and tube lights, benches, faculty table and chair
Class room WAB 206 (S5&S6)	Class room for III year students	Exclusive	81.6 sq. mts	Green board, LCD projector ,adequate number of fans and tube lights, benches, faculty table and chair
Class room	Class room for III year	Exclusive	81.6 sq.	Green board, LCD projector ,adequate

(S5&S6)	students		mts	number of fans and tube lights, benches, faculty table and chair
Class room WAB 106 (S7&S8)	Class room for IV year students	Exclusive	81.6 sq. mts	Black board, LCD projector, adequate number of fans and tube lights, benches, faculty table and chair
Class room (S7&S8)	Class room for IV year students	Exclusive	81.6 sq. mts	Black board, LCD projector, adequate number of fans and tube lights, benches, faculty table and chair
Tutorial Room 103	Tutorial	Exclusive	37 sq.mts	Chairs, Black board, adequate number of fans and tube lights
Seminar hall WAB 203	Seminar	Exclusive	136 sq.mts	Provision for OHP, LCD projector, CPU, adequate number of fans and tube lights, Black board, 66 chairs
Department library WAB 204	Library	Exclusive	15.33 sq.mts	Desk and benches accommodating 15 students, adequate number of fans and tube lights, a computer, technical books, project reports, general knowledge books etc.
Drawing Hall WAB 311	Drawing	Shared	137 sq.mts	70 numbers of drawing boards, Black board , Provision for LCD, adequate number of fans and tube lights

e) Students' laboratories:

Instrumentation Lab
Fluid Machinery Lab
Thermal Engineering Lab
Mechanical Workshop
CAD Lab
CAM Lab

Name of the Lab	Exclusive use/ Shared	Space, Number of Students
Instrumentation Lab	Exclusive	244.8sq.m 30 students
Fluid Machinery Lab	Exclusive	153 sq.m 30students
Thermal Engineering Lab	Exclusive	79.2sq.m
Mechanical Workshop	Exclusive	91.8sq.m 30students
CAD Lab	Exclusive	117.3sq.m, 30students

f) Research laboratories

Nil

39. List of doctoral, post-doctoral students and Research Associates a) from the host institution/university b) from other institutions/universities:

NA

40. Number of post graduate students getting financial assistance from the university:

NA

41. Was any need assessment exercise undertaken before the development of new programme(s)? If so, highlight the methodology.

NA

42. Does the department obtain feedback from

a. faculty on curriculum as well as teaching-learning-evaluation? If yes, how does the department utilize the feedback?

b. students on staff, curriculum and teaching-learning-evaluation and how does the department utilize the feedback?

c. alumni and employers on the programmes offered and how does the department utilize the feedback?

The students are asked to give unbiased and honest feedback. The process is transparent and does not disclose student identity.

The students evaluate the teachers in the following context:

- Engage lectures regularly on time
- Overall appearance and personal Communication Skills
- Explanation
- Use of supplementary methods
- Overall appearance and personal Communication Skills
- Explanation
- Use of supplementary methods
- Readiness to address student doubts
- Availability
- Use of black board
- Relationship with students

After collecting the online feedback from the students, the evaluation of the teacher is done by Quality Improvement Cell and teachers are evaluated based on the overall performance in the following categories:

Evaluation	Grade	Grade points
Excellent	A	5
Very Good	B	4
Good	C	3
Fair	D	2
Satisfactory	E	1

The complete report of all the Departments reaches Principal and the report of respective department is submitted to their respective Head of Department. The teachers with other grades introspect themselves and improve in the concerned areas.

A class committee meeting is conducted twice during each semester including the Head of Department, 6 students representing the class and the concerned faculties on each subject. The

students and the faculties can raise their concern on various issues related academic and general matters.

Verbal feedback is collected from the students during lectures and practical hours and the same is discussed with concerned head and necessary corrective action is initiated. Head of Department discusses the feedback with the concerned faculty for improvement.

The feedback is collected two times, once at mid semester and also at the end of the semester. About 95% of students participate and it is done on-line.

Comments are considered positively. Weaknesses with regard to teaching are expected to be rectified by the faculty with the sole objective of maintaining good academic practices and standards.

Basis of reward/corrective measures, if any

Based on the feedback collected from the students on the faculty and the result analysis, the following reward /corrective measures are taken up in the Institute.

Rewards

Appreciation letter by the HOD for those who produce 100% results in University Examinations.

Corrective measures

- Counselling the faculty who scored less than 3.5 points on 5 – point scale
- Sponsoring for refresher courses to improve the subject knowledge
- Organizing workshops on teaching methodologies
- Arranging specialized lectures by eminent faculty
- Making available e-lectures sourced from internet

43. List the distinguished alumni of the department (maximum 10)

Sl No.	Name	Affiliation
1	Nikhil N S	Asst. Professor
2	Bineesh Thanrakan	Infosys
3	Ajith Xavier	Federal Bank
4	Dijeo Romeo	Federal Bank
5	Rojin	Asst. Professor
6	Arun Pulleri	BARC
7	Sandeep R	GE, Bangalore
8	Sandeep M	GM, Bangalore
9	Albin Johnson	Federal Bank
10	Christo Antony	Kalpaka Designers & Engineers

44. Give details of student enrichment programmes (special lectures / workshops / seminar) involving external experts.

Professional Bodies

IEI – Institution of Engineers India

ISTE – Indian Society for Technical Education

IEEE Students chapter

AMES – Association of Mechanical Engineering Students

Year	Event	Associated with Professional bodies/industry	Date	Resource Person(s)
2012	Lecture on Teacher a leader	IEI- AMES	20/4/2012	Dr.M.K.Balakrishnan Nair
	Talk on Class room management	IEI-AMES	20/4/2012	Prof.P.I.Vargheese
	Talk on FEM Tool for solving engineering problems	IEI-AMES	21/4/2012	Mr.Suneeth Sukumaran
	Lecture on Strategy for a Qualitative change	IEI-AMES	21/4/2012	Mr.C.Karunakaran
	Engineers day celebration	IEI	15/09/2012	Rev.Fr. Dr Jose Kannampuzha.
	One day workshop on Tool engineering and Design	IEI-AMES	14/12/2012	Er.K.L.George Rtd engineer KELTRON
2013	Relevance of national and international accreditation	IEI-AMES	21/8/2013	Dr.S.Sreedharannair
	Mind Relax through Psychological Approach	IEI-AMES	08/08/2013	Dr. P K Balakrishnan
	PCB design and fabrication	IEEE	30,31/8/2013,1/9/2013	Mr.C.Karunakaran
	Expert talk on Entrepreneurship	IEEE	13th August 2013	Rev.Fr.Roy Joseph Vadakkan

	National Level Workshop	IEEE	8th and 9th March 2013	Mrs. Mini Ulanat (IEEE SAC, WIE Vice Chair – Kerala Section)
	Full day Robotic Workshop	IEEE	11th september 2013	Mr.Sunil Paul,IEEE SB Counselor
	Expert talk	IEEE	13th august 2013	Mr.Shahim Baker, Director Grey Technolabs, IEEE Kochi
2014	Six Sigma course	IEI-AMES	25/2/14	Mr.Premkumar
	Certified ASME Course on Design and Fabrication of pressure vessel	ASME-AMES	(14,15,16)/10/2014	Mr.P.G.SHAH
	Arduino workshop	IEEE	10th& 11th OCT2014	Mr Tijomon Gregory, IIT Delhi and Robosapiens Pvt Ltd
	National Level Workshop	IEEE	7th&8th March2014	Mr.Sabarinath G Pillai (Sec.IEEE Kerala Section)
2015	Expert talk on Nano fluids for heat transfer applications	IEI-AMES	25th March 2015	Dr. L.Godson Asirvatham, Associate Professor, Karunya University
	Expert talk on Mechanical vibration	IEI-AMES	25th March 2015	Dr. P. Sam Paul, Associate Professor, Karunya University

Organisation of paper contests, design contests, etc. and achievements

Sl. No.	Name of event	Date of event	Venue	Participants	Remarks
1	THARANG 2011 Vibhavana(track3) National level paper presentation contest	3/3/2012	Insight hall	B.Tech students including External Participants	Cash Prizes worth 15000/-

2	THARANG 2012 V.2 Vibhavana(track3) National level paper presentation contest	12/10/2012	Insight hall	B.Tech students including External Participants	Cash Prizes worth 10000/-
3	THARANG 2012 V.2 – Cad Master	11,12/10/2012	CAD LAB	B.Tech students including External Participants	Cash Prizes worth 15000/-
5	THARANG 2014Vibhavana(track3) National level paper presentation contest	25/1/2014	Insight hall	B.Tech students including External Participants	Cash Prizes worth 10000/-
6	THARANG 2014 Cad master	24/1/2014	CAD LAB	B.Tech students including External Participants	Cash Prizes worth 15000/-


ISTE- Indian Society for Technical Education – ISTE Student chapter started the activities in the year 2012.


Publication of Technical Magazines, Newsletters etc. (4)


Publications of newsletters and magazines have become a regular feature of JECC activities. The Department of ME has come out with a Newsletter highlighting the achievements, programmes organized and also with some latest information and updates in the current affairs of their respective fields in the Year 2013.

Students Achievements

Twenty Five students of B3 ME-B had undergone one day technical training on "Automotive Electrical System" at Bosch local training centre, Aluva on 16-11-2013.


 Sreevalsan S Menon, Sooraj M S, Sanjay Mohan, Rino Disney, Suneeth sukumaran "Design and Analysis of Kinetic Energy Recovery System in Bicycles" (IJRSEIT), Volume 2, August 2013

 Ajeesh Samuel V.C., Ajith Xavier, Christo Antony, Collins T.Anto published a technical paper entitled, "Experimental Investigation of a Solar Powered Eco-Fridge" International Journal of Engineering Research & Technology (IJERT), Vol.2 Issue 9, September

 Third Prize for Rabin Mathew, Rithin Johnson, Raphael A Vashappilly, Robowar, National level Techno-Cultural Fest, Malabar College of Engg Technology, Thrissur

Placement


Abin John, Alex Thomas, Rithin Thomas & Sreevalsan S Menon got campus placement on Infosys Bangalore. Ajith Xavier got campus placement on UST Global Trivandrum.



NEWSLETTER

Volume I, Issue I
June - December 2013


H.O.D's Message



Academic year 2013-14 started for Mechanical Engineering in June with high enthusiasm and willpower to achieve better examination results and other extracurricular activities than the last year. Higher level industry-orientation interaction is proved this year by starting of external projects of final year in reputed industries in Kerala. Let us study more about modern developments in theory and practice of Mechanical Engineering and become efficient and useful engineers for the future. Let the "Margayyaar" expedition continue to travel without trouble and be successful outcome in future. At the same time, we the family of mechanical engineers be ready to support for the next jump to the process of mankind. Be sincere, simple a hardworking with curiosity to know more so that the success will follow you always.

Dept. Activities

Three days workshop on "PCB Design & Fabrication" was organized by Mechanical Engineering Department in association with IEEE student branch started on 30th August. Mr.C.K.Sankaran of ME department & Ms. Rishna of EEE department were the convener.



Semester	Total Pass %	University Position
S8	93.20	4 th
S6	90.63	1 st
S4	82.72	7 th
S1S2	88.53	8 th

AMES (Association of Mechanical Engineering Students)

The inaugural function of AMES for the year(2013-2014) was organized on 21.08.2013.

The Chief Guest of the day Dr.M.R.S Nair, Former Principal Govt Engineering College Thrissur delivered the keynote address.



Staff Joined

 Ms.Nisha Shantik, Mr.Syamjith K, Mr.Tony Kotocor and Mr.Shak Athab S joined to the department as Assistant Professor.

Staff Achievements

 Mr.Melvinraj C R secured 2nd rank in M-Tech Thermal system in the academic year 2013-14.

 Christy V Vashappilly, Trijo Tharayil "Modeling and Experimental Analysis of Generator in Vapor Absorption Refrigeration System" International Journal of Engineering Research and Applications, Volume 3, August 2013.

 Christy V Vashappilly, Manojkumar VK, Praveen Raj "Experimental Analysis of Influence of Self Recovery Coefficient on Solid Concentration in Lubrication" International Journal of Engineering Research and Applications, Vol. 3, Issue 2, Sept-Oct 2013.

 Biju CV, Nikhil N S "Investigation of machinability of self-propelled rotary cutting tool", International Journal of Research in Aeronautical and Mechanical Engineering, Vol-1, Issue-3

 Aju Pius Thottungal "Controlling Measures to Reduce Rejection Rates Due to Forging Defects" International Journal of Scientific and Research Publications, Volume 3, Issue 3, March 2013.

 Mr. Tony Kotocor published a technical paper entitled "Comparison of Stainless Steel Film with NiTi Coated Stainless Steel Film using Electron Beam Physical Vapour Deposition Process" in "Diprantha Sagar International Journal management" Vol. 1, Issue 1, October 2013.

Staff Activities

 Mr.Suneeth Sukumaran attended a short term course on "Introduction to Finite Element Method (FEM) with Hands on Altair Hyperworks" at MDIT Jaipur from 03.06.2013 To 06.06.2013.

 Mr.Sreejith K. & Mr.Nikhil N.S. attended a two day workshop on "Measurements during metal cutting" jointly organized by Dept. of Mechanical Engineering, N.S.S College of Engineering, Palakkad & Dept. of Mechanical Engineering, Karunya University Coimbatore, Sponsored by AICTE, held on 11th & 12th October at N.S.S.C.E Palakkad.

 Mr.Nice Menachery, Mr.Melvinraj CR and Mr.Biju CV participated in the international conference on Safety by Design (ICSBD) held at JCET Palakkad on 16th and 17th Aug. 2013.

 Road demonstration of the Project "Externally controlled adaptive speed governing system" developed by (S7ME) Sibin Peter P, Sharath G Krishnan, Delvin Devassy, Basil Varghese under the guidance of Mr. Biju C V

 One day trip to Bhoothathankettu & Idukki Dam Reservoir as part of National Dam safety awareness day on May 2013

 One day Eco friendly trip to Kodaikanal as part of Environmental day

Entrepreneurship Activities, product designs and innovations

Entrepreneurship Development Cell (EDC) has been functional in the college since year 2009 to inculcate entrepreneurial orientation among students through formal and non formal programmes. EDC also aims to enhance analytical skills and general awareness of students and to promote skills of interaction in groups & leadership styles through conducting workshops on entrepreneurial Development. EDC also make train students to work and make employability to

himself or become JOB CREATORS. The students of the Department of ME are actively participating in the programmes conducted by the Cell. **Mr Vicky Wilson of Final year ME** Department holds the position of Student Entrepreneurship Network –incharge of the college. Ten Student members are elected from final semester in the Department to represent in the EDC and listed below.

Mr .Albin Johnson

Mr.Francis Augustine

Mr.Febin Thomas

Mr.Aravind k

Mr.Joel George

Mr.Vishal Varghese

Mr.Shino Simon

Mr.Steffin Raphel

Mr.Mobin Pylan

Mr.Leon Kalley Poullose

The following are the few events conducted by EDC during the current academic year:

- An invited talk on "Importance of Entrepreneurship in campus" on 28th March 2014 in Decennial Hall by Alex P George, CEO, ALCO FASTENERS, Visiting Professor @ IIM, Kozhikode & an alumnus of IIT/IIM was conducted.
- An Invited talk by the senior Director from NASSCOM Mr. Purushothaman was held.
- Entrepreneurship Development Cell (EDC) of Jyothi Engineering College, organized Entrepreneurship Day Celebration and Inauguration on 23/10/2014, with the launch of website & logo release. The Guest of the day were Ms. Deena Venugopal (Founder of Anabytes) and Mr. Rajeev Krish (Founder and Director, WAUM Team).

45. List the teaching methods adopted by the faculty for different programmes.

- i) PPT/LCD Projector
- ii) Internet facility
- iii) Video Lectures
- iv) 1 Tutorial/week/subject
- v) Project Work
- vi) Assignments

46. How does the department ensure that programme objectives are constantly met and learning outcomes are monitored?

- Adequate student teacher ratio 1:15.
- The management has provided internet access and E – Journal access to all students and faculty.
- Facilitate the conduct of Technical fests, invited talks etc.
- Provides adequate teaching learning equipments like LCD projectors to the department.
- Facilitate to improve the student technical skills by conducting various certified courses required for the students to become a successful professional.

The following activities are carried out in the Department for the attainment of PEOs

Sl. Nos.	Activities	Functions	In charge	PEO's met
1	Department Advisory Committee	Department advisory committee chaired by HOD Interacts and maintains liaison with key Develops and recommends revised objectives of the Program. Reviews and analyzes the gap in the curriculum and give necessary feedback or advice Meets at least twice in a year to review the programs.	Prof. K.C.John, HOD,ME	1, 2, 3
2	Department Assessment Committee	Evaluates program effectiveness and proposes necessary changes for the attainment of PO's and PEO's Motivates the faculty and students towards paper publications and research and attending workshops, developing projects and	Prof. K.C.John, HOD ME, Mr. Biju C.V., Mr.Manoj KumarV.K.	1, 2, 3

		working models		
3	Teaching & Learning Process	Oversees daily Operations and coordinates activities of the program with inter related activities of other programs, departments or staff to ensure optimum efficiency and compliance with appropriate policies, procedures and specifications.	Mr. Biju C. V	1, 2, 3
4	Purchase	Purchases the necessary lab equipments, consumables, softwares etc.	Prof. K.C.John, HOD ME, Mr. K. Raghavan, Mr. Manoj Kumar V.K., Resp. Lab in Charge & Resp. Lab assistant	1, 2
5	Department Library	Purchase of department books, journals and magazines for library	Mr. Sheik Afthab S.	1, 2, 3
		Maintenance of department project report		
6	Lab Manual Updating	Updates the lab manual according to the curriculum periodically.	Mr. Melvinraj C. R	1, 2
7	R & D Consultancy	Promotes research and consultation activities	Mr. Biju C. V	1, 2, 3
8	Industry Institution Interaction	Coordinates with staff and students to bridge the gap in curriculum	Mr. Biju C.V.	1, 2, 3
9	Subject allocation & time tabling	Prepares time table and work load for the faculty	Mr. Praveen raj	1, 2
		Arranges guest lecturers from		

10	Association, Short Term Courses and Training Programmes	institutes of eminence and industries for the students to know the latest trends in Mechanical Engineering.	Mr.Suneeth Sukumaran, Mr.Manoj KumarV.K.	1,2,3
11	Examinations(Internal and University)	Assists with college Exam cell in conducting series Tests and university examination	Mr. Nice Menachery, Mr. Sreejith K.	1
		Prepares exam schedule for series test and maintain internal marks		
12	PTA, Alumni, Counseling & Guidance	Organizes PTA meeting periodically.	Mr. Nikhil N.S., Mr.NiceMenachery, Mr.Ajith Krishnan R., Mr. Praveen Raj	3
		Coordinates alumni Data collection and conducts alumni meeting once in a year.		
		Provides Counseling & Guidance to the students		
13	Professional Activities/ Placement and Training	Coordinates with Training and Placement cell for placement and Higher Studies.	Mr. Praveen Raj, Mr.Cijil B. John, Mr.Christy V.Vazhappilly, Ms. Nisha Sherief	1,2,3
		Motivates the students to join different professional bodies and conduct various cocurricular activities.		
14	Documentation and ISO Matters	Assists in preparation and compilation for ISO certification	Mr. Hareesh N.V., Mr. Jithin K. Kuriakose	1,3
15	Staff and Student Seminars	Arranges students and staff seminars	Mr. Melvin Raj C.R.	1,3
		Consists of HOD, Group Tutors, faculty		

16	Class Committee	handling the Class (incl. at least one faculty from other department) and Three Student representatives (Top, Medium, Low scorer) from respective class.	Respective Group Tutors	1,2,3
		Interacts with students and faculty handling courses in each semester		
		Monitors and reviews The activities of the class		
		Conducts class committee meetings and analyses the feedbacks to take necessary action.		
17	Department Newsletter/College Magazine Committee	Coordinating and managing magazine/newsletters.	Mr. Ajith Krishnan R	2,3

47. Highlight the participation of students and faculty in extension activities.

Student Activities

- Department students are part of College NSS Activities
- Participation of students in blood donation camp
- Participation in environmental awareness programmes

Extension Activities - Faculty

- Faculty development programmes
- workshops and seminars on various topics from engineering field.

48. Give details of “beyond syllabus scholarly activities” of the department.

A **Central library, digital library and department library** with excellent collection of reference books, text books are available. The central library remains open after the normal working hours so

that students can do extra reading. The students can also refer to advanced text books suggested by the teacher, apart from the prescribed text and reference books listed in the syllabus.

The **laboratories** also remain open after working hours on request by students so they can improve their practical skills.

The institution conducts Techfest "**Tharang**" every year where the students can get an environment for self learning through paper presentation, project presentation. They also develop their leadership qualities and learn to work as part of team.

A **computer centre** with internet facility remains open after working hours in the evening. The day scholars and hostel students can make use of this facility. A number of e-journals are available in the digital library for the students.

Facilities for self learning

Facilities Available: Digital Library, Department Library, E learning Resources, Central Computing Facilities, Department Labs, Workshops and Seminars and Technical Events

Category of International Journals in central library

Elsevier Advanced Technology, North-Holland, Academic Press and Pergamon

List of Journals in central library

Sl. No.	List of Journals/Magazines
1	CSI
2	Dataquest
3	Digit
4	Electrical India
5	Electronics Bazaar
6	Electronics For You (w/CD)
7	Electronics Maker
8	Embedded For You
9	International Journal of Data Mining and Emerging Technologies
10	International Journal of Applied Research on Information Technology and Computing (IJARITAC)
11	Journal of Entrepreneurship
12	Journal of the Institution of Engineers -Series A
18	Journal on Electronics Engineering
19	Linux For You (with PRO+CD)
20	Outlook
21	PC Quest

22	Research Journal of Engineering and Technology (Online)
23	Resonance
24	Telecommunications
25	The Indian Journal of Technical Education
26	The Week
27	Time
28	University News

Contents of the self-learning modules:

- Paper presentation in seminars
- Group discussion & Role Play / Peer discussion
- Project related information- Record books
- Net browsing on education related topics
- CDs supplied along with text books
- CDs supplied along with journals
- Different Web sites for improving communication skills
- GATE material from Brilliant, GK Publishers
- GRE material for higher education abroad
- TOEFL CDs for language test for higher education abroad
- CAT/MAT entrance exam CDs
- Old question papers – hard and soft copies
- Competitive exam and subject fundamental related information
- Audio Visual materials
- Training classes in aptitude and basic subjects
- Solved Model Questions and multiple-choice-questions are available.
- Additional courses available for the 1st, 2nd, 3rd and 4th B.Tech programs.

Motivation

- Students are encouraged to utilize the self-learning modules available in the institute so as to develop their understanding on various emerging topics, come out with innovative ideas, prepare research papers and present them in various conferences and project exhibitions.
- Students are provided with internet facility in the Internet Lab in order to fetch the required information.
- Departmental Libraries are maintained by the respective departments for easy and quick access.
- Students are given assignments on advanced topics.
- The students are encouraged by faculty and by providing financial assistance for registration and travel for various technical activities.

- Staff members guide students for such activities.
- Through this programme, students are trained to achieve technical skills as per the expectation of various industries.

Students are guided on advanced topics and also in respect of the following:

- Contents and explanations
- Appropriate additional topics downloaded from internet
- Material supplied by experts
- Mini Projects
- Assignments

49. State whether the programme/ department is accredited/ graded by other agencies? If yes, give details.

No

50. Briefly highlight the contributions of the department in generating new knowledge, basic or applied.

The Dept. of Mechanical Engineering is always keen & interested to keep the students & faculty up to date in their respective engineering fields. Various Faculty Development Programmes & Workshops have been organized at the college & department level, for training the faculty about the innovations in the field of Science and Technology.

Various workshops and Short term training programmes for students, are being organized by Association of Mechanical Engineering Students (AMES) in collaboration with Indian Society for Technical Education (ISTE) and American Society of Mechanical Engineers (ASME).

51. Detail five major Strengths, Weaknesses, Opportunities and Challenges (SWOC) of the department.

STRENGTH

- A team of highly talented & motivated faculties.
- A well maintained department library with sufficient no. of text books.
- Fairly good and disciplined students.
- Motivation and support to students in co-curricular and extra-curricular activities
- Continuous up gradation of academic facilities

WEAKNESS

- Require a lot of financial resource for modernising the laboratories
- Communication skills of students
- Conceptual understanding of our graduates needs improvement
- Research output in terms of publication in reputed journals needs improvement
- No sponsored research from industries.
- Utilization of resources to be enhanced

OPPORTUNITIES

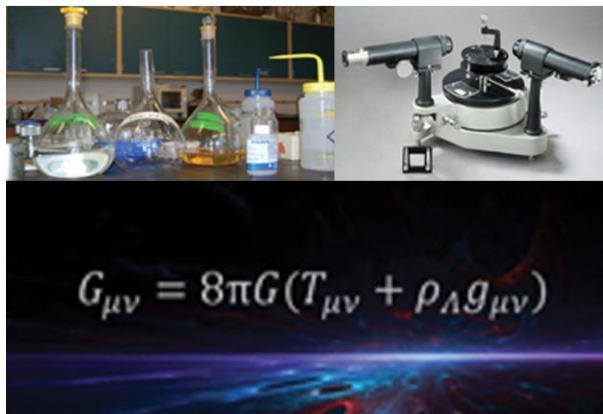
- Obtaining funding for research activities
- Enhancing industry-institute tie up
- Internship programme for students

CONSTRAINTS

- Quality of Students intake.
- Low percentage of result.
- Poor campus placement

52. Future plans of the department.

- Internship programme for students.
- Coaching programmes for enhancing employability (GATE, CAT, MAT, G-MAT coaching/communication workshops etc.)
- Improving the laboratory facilities.



**DEPARTMENT OF BASIC
SCIENCE & HUMANITIES**

DEPARTMENT OF BASIC SCIENCE AND HUMANITIES

1. **Name of the department: Basic Science and Humanities**
2. **Year of Establishment: 2002**
3. **Names of programmes/ courses offered: Nil**
4. **Names of Interdisciplinary courses offered and departments/units involved: Nil**
5. **Scheme of programmes offered: Choice based credit and semester system**
6. **Participation of the department in the courses offered by other departments:**

1. B.Tech:- Civil Engg., Computer Science Engg., Electrical and Electronics Engg.,
Electronics & Communication Engg. and Mechanical Engg.

2. M.Tech.: - Computer Science Engg., Power Electronics

7. **Courses in collaboration with other universities, industries, foreign institutions, etc: Nil**
8. **Details of programmes / courses discontinued, if any, with reasons: Nil**
9. **Number of teaching posts**

	Sanctioned	Filled
Professors	5	5
Associate Professors	Nil	Nil
Asst. Professors	14	14

10. Faculty profile with name, qualification, designation, specialization

11.

Name	Qualification	Designation	Specialization	No. of years of experience	No. of Ph. D. students guided for the last 4 years
Fr. John Tharayil	M.Sc., M.A	Professor	Mathematics	36	
Ms. Minu Jos K.	M.Sc. M.Phil.	Asst. Professor	Mathematics	13	
Ms.Smija Skaria	M.Sc. M. Phil	Asst. Professor	Mathematics	12	
Dr. K.R. Sandeep Narayan	M.Sc., Ph.D.	Asst. Professor	Mathematics	12	
Mr. Sivakumar K.S.	M.Sc.	Asst. Professor	Mathematics	14	
Ms. Renju Francis	M.Sc. M. Phil	Asst. Professor	Mathematics	12	

Ms. Nivya Wilson	M.Sc. M.Phil.	Asst. Professor	Mathematics	8	
Ms. Viji, E.P.	M.Sc.	Asst. Professor	Mathematics	8	
Mr. Rich, K.J.	M.Sc.	Asst. Professor	Mathematics	5	
Fr. George Plassery	M.Sc. MCS	Professor	Physics	38	
Ms. Priya Jose	M.Sc.M.Phil.	Asst. Professor	Physics	8	
Ms. Sruthy, K.	M.Sc.	Asst. Professor	Physics	0	
Dr. M. Balagopalan	M.Sc. Ph. D	Professor	Chemistry	37	3
Ms. Jasmin Jose	M.Sc. M.Phil.	Asst. Professor	Chemistry	13	
Ms. Sruthi M. Nair	M.Sc.	Asst. Professor	Chemistry	1	
Dr. Baby C.B.	M.A., M.Phil., Ph. D	Professor	Economics	35	
Dr. Usha Menon	MA, Ph. D., PGDTCE Dip. J.	Professor	English	35	5
Fr. Roy, V.I.	MBA	Asst. Professor	Management	7	
Mr. John, V. J.	B.P.E., M.P.Ed	Lecturer	Physical Education	10	

12. List of senior visiting faculty: Nil

13. Percentage of lectures delivered and practical classes handled (programme wise) by temporary faculty Nil

14. Student Teacher Ratio (programme wise): 25:1

15. Number of academic support staff (technical) and administrative staff: sanctioned & filled

S. No.	Post	Sanctioned	Filled
1	Lab Assistants	2	2

16. Qualifications of teaching faculty with D Sc/D.Litt/Ph.D/M.Phil./PG

Name	Qualification	Designation	Specialization
Fr. John Tharayil	M.Sc., MA	Professor	Mathematics
Ms. Minu Jos K.	M.Sc. M.Phil.	Asst. Professor	Mathematics
Ms.Smija Skaria	M.Sc. M. Phil	Asst. Professor	Mathematics
Dr. K.R. Sandeep Narayan	M.Sc., Ph.D.	Asst. Professor	Mathematics
Mr. Sivakumar K.S.	M.Sc.	Asst. Professor	Mathematics
Ms. Renju Francis	M.Sc. M. Phil	Asst. Professor	Mathematics
Ms. Nivya Wilson	M.Sc. M.Phil.	Asst. Professor	Mathematics
Mr. Rich, K.J.	M.Sc.	Asst. Professor	Mathematics
Ms. Viji, E.P.	M.Sc.	Asst. Professor	Mathematics
Fr. George Plassery	M.Sc. MCS.	Professor	Physics
Ms. Priya Jose	M.Sc. M.Phil.	Asst. Professor	Physics
Ms. Sruthy, K.	M.Sc.	Asst. Professor	Physics
Dr. M. Balagopalan	M.Sc. Ph. D.	Professor	Chemistry
Ms. Jasmin Jose	M.Sc., M.Phil.	Asst. Professor	Chemistry
Ms. Sruthi M. Nair	M.Sc.	Asst. Professor	Chemistry
Dr. Baby C.B.	M.A., M.Phil., Ph. D.	Professor	Economics
Dr. Usha Menon	MA, Ph. D., PGDTCE, Dip. J.	Professor	English
Fr. Roy, V.I.	MBA	Asst. Professor	Management
Mr. John, V. J.	B.P.E., M.P.Ed.	Lecturer	Physical Education

17. Number of faculty with ongoing projects from a) national b) international funding agencies and grants received: Nil

18. Departmental projects funded by DST-FIST; UGC; DBT, ICSSR etc. and total grants received: Nil

19. Research Centre/ facility recognized by the university: Nil

20. Publications

Publication per faculty

Number of papers published in peer reviewed journals (national / international) by faculty and students

Number listed in International Database (For e.g. Web of Science, Scopus, Humanities International Complete, Dare Database - International Social Sciences Directory, EBSCO host, etc.)

Monographs

Chapters in Books

Books edited

Books with ISBN/ISSN numbers with details of publishers

Citation Index

SNIP

SJR

Impact factor

h – index

Dr. K. R. Sandeep Narayan

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Prof. (Dr.) M. Balagopalan.

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21. Areas of consultancy and income generated. -

Prof. (Dr.) M. Balagopalan

No.	Consultant/ Resource Person	Institution	Problem
1	Consultant	Hindusthan Newsprint Ltd. Velloor	Assessing the suitability of areas allotted to HNL, Velloor for raising captive plantation
2	Consultant	Kerala Forest Department	Evaluation of soils in the Ranni and Perambra Watershed, Kerala Enhancement of productivity of degraded Teak plantations at Karikulam and Chetthakkal areas of Ranni Range, Ranni Forest Division, Kerala. Ecorestoration of the Upper Moozhiyar watershed area in Ranni Forest Division, Kerala Evaluation of areas undergoing various treatments under World Bank Funded Kerala Forestry Projects

			<p>Training programmes on fire protection in forest areas</p> <p>Package of practices for teak and eucalypt plantations</p>
3	Consultant	Kerala Forest Development Corporation	Assessment of Silent Valley, Munnar area for <i>Acacia mearnsii</i> plantations for KFDC, Munnar Division
4	Resource Person	NABARD	Residential refresher course on Forestry for the Officers of NABARD
5	Resource person	CUSAT	UGC Refresher course for College and University Teachers
6	Consultant	Kerala Chemicals and Proteins Ltd., Ossein Division, Kartikudam	Assessment of environment problems
7	Coordinator	Farmers of various States	Teak Cultivation and Management
8	Consultant	Ecoforest, Costa Rica, S. America	Soil and disease problems of teak plantations of Ecoforest S.A., Panama and Guatemala
9	Resource Person	Forestry professionals from Coasta Rica, S. America	Plantation Productivity
10	Resource person	AICTE Refresher course for Engineering College Teachers	Effects of Contaminants on Soil and Water
11	Adviser	ODA programme, British Council	ODA programme of Scientists from Lumle Agriculture Research Institute, Pokkara, Nepal, at KFRI

12	Consultant	Kerala Rubber and Reclaims Ltd., Mamala, Ernakulam	Teak Cultivation and Management
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22. Faculty as members in

a) National committees b) International committees c) Editorial Boards.....

Sl.No.	Name	Committees	National/ International committee/Editorial Boards
1	Ms. Minu Jos K.	Life member of Indian Society for Technical Education (ISTE)	
2	Ms. Snija Skaria	Life member of Indian Society for Technical Education (ISTE)	
3	Dr. K.R. Sandeep Narayan	Life member of Indian Society for Technical Education (ISTE)	
4	Mr. Sivakumar K.S.	Life member of Indian Society for Technical Education (ISTE)	
5	Ms. Renju Francis	Life member of Indian Society for Technical Education (ISTE)	
6	Ms. Nivya Wilson	Life member of Indian Society for Technical Education (ISTE)	
7	Ms. Priya Jose	Life member of Indian Society for Technical Education (ISTE)	
8	Dr. M. Balagopalan	Journal of Advances in Plant Sciences Journal of Tropical Forest Science, Malaysia Journal of Malaysian Forester Journal of Bamboo and Rattan Journal of Soil Biology and Ecology, Bangalore Journal of Indian Society of Soil Science, New Delhi Current Science, Bangalore	Editorial Board/ International Editorial Board/ International Editorial Board/ International Editorial Board/ International Editorial Board/ International Editorial Board

		<p>Life Member, Indian Society of Soil Biology and Ecology, Bangalore</p> <p>Member, Indian Society of Soil Science, New Delhi</p> <p>Life Member, Academy of Plant Sciences, India</p> <p>Life Member, International Congress of Chemistry and Environment, India</p> <p>Expert member, Coir Geotextile Development Programme, Govt. of Kerala</p> <p>Member, Working Group for Coir, Govt. of Kerala</p> <p>Member, Building Committee for Coir Machinery Factory, Govt. of Kerala</p> <p>Expert Member, Committee for monitoring the works related to coir in Tsunami affected areas.</p> <p>Expert Member, Committee for monitoring the DF mills, Govt. of Kerala</p> <p>Convener, Fair price fixing committee for coir fibre and coir yarn</p> <p>Convener, Metro Fair held at Trivandrum 2010.</p> <p>Associate Convener, Alappuzha Coirfest 2010, Ambalapuzha Coirfest 2010, Vayalar Coirfest 2010 and Malabar Coirfest 2010.</p> <p>Associate Convener, International Coirfest, Alappuzha 2010.</p>	Referrie
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		Convener, Committee for establishment of a Monument in commemoration of International Coirfest	
9	Ms. Jasmin Jose	Life member of Indian Society for Technical Education (ISTE)	
10	Dr. Baby, C.B.	Life member of Indian Society for Technical Education (ISTE)	
11	Dr. Usha Menon	Life member of Indian Women's Association(IWA) LITTCRIT Native Petals Little Hands	National Editorial Board Editor Advisory Board
12	Fr. Roy, V.I.	Life member of Indian Society for Technical Education (ISTE)	

23. Student projects : Nil

- a) Percentage of students who have done in-house projects including inter-departmental /programme NA
- b) Percentage of students doing projects in organizations outside the institution: NA

24. Awards / recognitions received by faculty and students

Dr. M Balagopalan

has been awarded International Plant Scientist award in 2006 instituted by Academy of Plant Sciences

He is also a

Fellow, International Congress on Chemistry and Environment

Fellow, Academy of Plant Sciences

25. List of eminent academicians and scientists/ visitors to the department

Dr. V S Vijayan, former chairman Biodiversity Board and Dr. T V Sajeew, Principal Scientist, KFRI, Peechi visited the department

26. Seminars/ Conferences/Workshops organized and the source of funding

a) National

In the year 2012, the Department of Basic Science and Humanities organized a two day National level Faculty Development Programme on the topic 'Emerging Trends in Science

and Current Affairs'. The seminar was inaugurated by Prof. K Raveendranath, Former Pro-Vice Chancellor, University of Calicut. Funding was from the college.

b) International NIL

27. Seminars/ Conferences/Workshops attended

NAME	SEMINAR TITLE AND VENUE	Year
Dr. Usha Menon	Centre for canadian studies , TVM	March 1992
	Research Centre, All Saints' College -Seminar	Aug 1996
	St. Theresa's College, Ernakulam Seminar Vol	Nov 1997
	CSR South Regional Centre, TVM – Conference	Dec 1999
	Kerala Centre for Christian Higher Education, Kottayam	July 1994
	Center for Austratian Studies, University of Kerala – Seminar	Feb 1996
	Prajoti Niketan , Trichur	Sep 1996
	Centre for Canadian Studies, University of Kerala	Oct 1998
	IDE, University of Kerala –	Jan 1999
	Vimala College, Trichur – Seminar	Feb 2000
	Prajoti Niketan, Pudukad – Seminar	Oct 2000
	Sacred Heart College, Kochi – Seminar	Oct 2001
	IACLALS, Institute of English and Centre for Australian Studies – International Conference.	Jan 2000
	Sahitya Academy & Centre for Comparative Literature	Jan 2000
	Vimala College, Trichur	March 2000
	Institute of English, University of Kerala, Thiruvananthapuram	Nov 2001
	International Center for Kerala Studies, Kariavattom, TVPM	Jan 2002
	Women's Initiatives, Human Rights Commission & N.S.S Unit, All Saints'College, Tvp	Aug 2000
	All Saints' College, Thiruvananthapuram Govt. College for Women	March 2002
	Bodheswaran Foundation	Jan 2002
Centre for Canadian Studies	March 2002	
		Dec 2004
Dr. M. Balagopalan	National Seminar on Trees and People, Cochin	March 1980
	National Seminar on Eucalypts, KFRI, Peechi	Jan. 1984
	Seminar on Ecodevelopment of Western Ghats, Kerala Forest Research Institute, Peechi.	September 1984

International seminar on Geo Botany and Bio Geo Chemistry in Exploration in Ground Water and Mineral Resources, Sri Venkiteswara University, Tirupathy, Andhra Pradesh.	September 1984
International Symposium on Tropical Ecology, Banarus Hindu University, Varanasi.	September 1984
National Symposium on Biology in the Service of Mankind, Madurai Kamraj University, Madurai.	November 1984
First Kerala Science Congress, Cochin.	Jan. 1989
Regional Synposium on Recent Development In Tree Plantations of humid/ subhumid Tropics of Asia Selangor, Malaysia.	Februaruy 1989
National Seminar on Forest Fire, Trivandrum.	June, 1989
Seminar on Environmental Problems of Kerala, Palghat.	September 1992
National Seminar on Rattan (Cane), KFRI, Peechi.	September 1992
First International Forum on Soil taxonomy and sustainable land use management, Trivandrum.	December 1992
Fifth Kerala Science Congress, Kottayam.	January 1993
Sixth Kerala Science Congress, Trivandrum.	January 1994
Symposium on Soil Mapping for Resource Planning, Trivandrum.	December 1993
Seventh Kerala Science Congress, Palghat.	January 1994
Eighth Kerala Science Congress, Cochin.	January, 1995
Ninth Kerala Science Congress, Trivandrum.	January, 1996
Seminar on the Ecology of Moist Forests in South India, Madurai.	January 1997
Annual group meeting- cum- symposia on Agroforestry, Vellanikkara.	April, 1997

Seminar on Forestry Towards 21st Century, Tamil Nadu Agricultural University, Coimbatore.	February 1998
Regional Level Contact Workshop on Natural Resources Data Management systems (NRDMS), Centre for Earth Science Studies, Trivandrum.	September 1999
9th Swadeshi Science Congress, Kollam.	October 1999
Workshop on Site management and productivity in Tropical Plantation Forests, KFRI, Peechi.	November 1999
12th Kerala Science Congress, Peerumedu.	January 2000
Workshop on Watershed Development, Management and Evaluation in the Western Ghats region of India, CWRDM, Calicut.	February, 2000
National Workshop on Soil Survey and Mapping of Rubber Growing Areas in Kerala and Tamil Nadu, Rubber Research Institute of India, Kottayam.	March 2000
Seminar on Environment and Climate Change, Trichur.	June 2000
International Symposium on Tropical Forestry Research: Challenges in the 21st Century KFRI, Peechi.	August 2000
State level Seminar on Coir Geo-Textiles, Trivandrum.	October 2000
Workshop on Site Management and Productivity in Tropical Plantation Forests, KFRI, Peechi.	October 2000
Workshop on Preparation of Package of Practices, Kerala Agric.University, Vellanikkara.	November 2000
International Conference on Quality Timber Products of Teak from Sustainable Forest Management, Kerala Forest Research Institute, Peechi.	December 2003
National Seminar on Forest, Water and People, National Institute of Hydrology, Belgaum, Karnataka.	July 2004,
Seminar Coir Research – 2004, Central Coir Research Institute, Kalavoor, Alleppy	August, 2004

	Seminar on Efficient Method Development, Chennai.	September 2004
	Workshop on Natural Resource Management: Changing Scenarios and Shifting Paradigms, Kerala Agricultural University, Vellanikkara.	September 20 04
	One–day State Level Awareness Camp for Sustainable Water Resource Development through Rain Water Harvesting, Science & Technology Museum, Trivandrum.	October, 2004
	Seminar on Fire Management, Punalur.	December 2004
	National Workshop on Managing Land Quality for Sustainable Agriculture, Trivandrum.	January 2005
	Inaugural function of the Geomatics Laboratory and Symposium, Trivandrum.	January 2005
	National Seminar on Application of Homoeopathy in plants, animals, birds, fishes, soil, water and environment, KAU main Campus, Vellanikkara.	February 2005
	Training programme on Application of Coir Geo-textiles for Construction of Check dam, stream bank erosion control and slope stabilization, Wayanad.	April 2005
	National Workshop on Status and Future of Mixed Forest Plantations, KFRI, Peechi.	June 2005
	Workshop on Good Laboratory Practice, CUSAT	January 2006
	Seminar on Technology of Particle Size and Shape Analyser, CUSAT	January 2006
	National Conference on Forest Biodiversity Resources: Exploitation, Conservation and Management Madurai Kamraj University, Madurai	March 2006
	Seminar on PCR and Pure Solutions, Thrissur.	April 2006
	Symposium on Need for Better Natural Resources Management for Kerala, Trivandrum.	July 2006
	National seminar on Recent Advances in Soil Research and special seminar on Land Evaluation for Multipurpose Land	September 2006

use Utilisation, Tamil Nadu Agricultural University, Coimbatore.	
National Conference on New Vistas in Microbiology and Plant Sciences, Hardwar.	September 2006
First Technical Committee Meeting on Disaster Management, Trivandrum.	December 2006
National Workshop on Fertility Evaluation for Soil Health Enhancement, Trivandrum	September 2007
Regional Workshop on Processing and Marketing of Teak Wood Products of Planted Forests, Peechi	September 2007
National Seminar on Bio-engineering for Environmental Monitoring, Kodakara,	October 2007
17th Swadeshi Science Congress, Kozhikode	November 2007
Twentieth Kerala Science Congress, Trivandrum	Jan. 2008
Workshop on applications of Coir geo-textiles, Trivandrum	June 2008
Workshop on Greening of Coastal areas, Nattika	August 2008
National Seminar on Global Warming, Trivandrum.	February 2009
National Workshop on Clean Development Mechanism and Carbon Trading, Cochin	July 2009
India International Trade Fair at New Delhi	January 2010
XXII Kerala Science Congress, Peechi	January 2010
India Carpet Expo, New Delhi	Feb. 2010
Domotex Exhibition, Dubai	May 2010
IFEX, Japan	October 2010
Annual convention of ISTE, Kerala section held at Jyothi Engineering college Cheruthuruthy	October 2014
Technical Seminar on plastics Recycling and Waste Management, Cochin	January 2014

	FDP on Empowering through team work at Jyothi Engineering College Cheruthuruthy	June 2015
<i>Ms. SMIJA SKARIA</i>	FDP on Empowering through team work at Jyothi Engineering college Cheruthuruthy Annual convention of ISTE, Kerala section at Jyothi Engineering college Cheruthuruthy National Seminar on Emerging trends in Science and current affairs at Jyothi Engineering college Cheruthuruthy	June 2015 October 2014 February 2012
<i>Ms. PRIYA JOSE</i>	FDP on Empowering through team work at Jyothi Engineering college Cheruthuruthy Annual convention of ISTE, Kerala section held at Jyothi Engineering college Cheruthuruthy National Seminar on Emerging trends in Science and current affairs held at Jyothi Engineering college Cheruthuruthy FDP on Nanotechnology held at Jyothi Engineering college Cheruthuruthy National conference on Nanostructured materials and nanocomposites at NSS college Ottapalam Continuing education FDP on Energy, Environmental & biomedical applications of Nanomaterials at Indian Institute of Technology Madras National seminar on Astrophysics and Astronomy at Carmel college Mala	June 2015 October 2014 February 2012 March 2011 March 2011 September 2010 February 2009
<i>Ms. RENJU FRANCIS</i>	FDP on Empowering through team work at Jyothi Engineering college Cheruthuruthy Annual convention of ISTE, Kerala section held at Jyothi Engineering college Cheruthuruthy ISTE RMAP(Ramanuja Mathematics Awareness Programme) Vidya Academy of Science and Technology National Seminar on Emerging trends in Science and current affairs held at Jyothi Engineering college Cheruthuruthy Relevance of Mathematics in Engineering	June 2015 October 2014 March 2013 February 2012
Ms. Viji E.P.	National Workshop on Cryptography National Conference on Recent Trends in Advanced	Aug-2009 Aug-2007

	Mathematics	
	Know How-Faculty Empowerment Workshop	Feb-2012
	Adyaapanam - FDP	Aug-2010
Ms. Jasmin Jose	Cryogenics engineering and its applications” at Ambedkar institute of technology Bangalore.	June 2014
	Workshop on “Aspects of theoretical chemistry and spectroscopy” SNGS College, Pattambi on	June 2014
	All India seminar on “Environmental issues in production engineering” JECC.	August 2004
	Two day lecture workshop on “Advances in molecular spectroscopy” organized by Department of chemistry, SNGS College, Pattambi	March 2010
	Internal Auditor training programme at JECC	March 2010
	National conference on ”Nanostructured materials and nanocomposites N.S.S College Ottappalam	January 2011
	FDP on “Mobile communication” JECC	March 2011
	Seminar on ‘Emerging trends in Science and Technology” JECC	March 2012
	Training programme on “Green Strategies for Environmental Issues” Govt. Engineering College Thrissur	February 2012
	Residential Training Programme for improving professional Excellence of JECC at CSR Pariyaram, Chalakudy	November 2012
	Workshop on Aspects of Quantum chemistry and spectroscopy St Joseph’s College, Irinjalakuda	July 2013
	25 th Annual Convention of ISTE, Kerala Section at Jyothi Engineering college Cheruthuruthy.	October 2014
	FDP on “Empowering through Team Work” JECC	June 2015

<i>DR. K. R. SANDEEP NARAYAN</i>	FDP - networks and their applications to engineering, NIT Calicut,	June 2013.
	FDP – mobile communication, Jyothi Eng. College	March 2012.
	National Conference Emerging trends in fluid mechanics and graph theory, Christ University, Bangalore,	February 2011
	International Conference – International Conference on Graph Theory and Its Applications, at Amrita School Of Engineering, Coimbatore,	December 2008.
	Workshop – Recent advances in operations research and graph theory, at NIT Calicut,	December 2005.
<i>MR. K.S. SIVAKUMAR</i>	25 th Annual Convention of ISTE, Kerala Section “at Jyothi Engineering college Cheruthuruthy.	October 2014
	FDP on “Empowering through Team Work” JECC	June 2015
	National Seminar on Emerging trends in Science and current affairs held at Jyothi Engineering College Cheruthuruthy	Feb 2012
	Quality System Training	Jan. 2011
	Orientation course for the P.Os of NSS , Kalamasserry	July 2014

28. Student profile program/ course wise: 2014 – 2015

Name of the course/programme	Applications received	Selected	Enrolled	
			*M	*F
First Year B.Tech.				

29. Diversity of students

Name of the course	Percentage of students from the same state	% of students from other states	% of students from abroad
First Year B. Tech. 2012, 2013, 2014 and 2015	100%	-	-

30. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, civil services, defence services, etc? NA

31. Student progression NA

32. Details of infrastructural facilities

- a) Library: The department has about 300 books in a separate section
- b) Internet facilities for staff and students: Wi-Fi available
- c) Class room with ICT facility: Nil
- d) Laboratories: 2
 - Physics Laboratory
 - Chemistry Laboratory

33. Number of students receiving financial assistance from college, university, government or other agencies:

42 % students approximately per year

34. Details on student enrichment programmes (special lectures/ workshops/ seminars) with external experts: Nil

35. Teaching methods adopted to improve student learning

- a) Chalk and Board
- b) Power point presentation
- c) OHP presentation
- d) Audio – Visual aids (Films and videos on subject related topics)
- e) Case study method
- f) Group Discussion method
- g) Class interaction
- h) Debates and quiz
- i) Reference books

36. Participation in Institutional Social Responsibility (ISR) and Extension activities: Nil

37. SWOC analysis of the department and future plans

Strengths

- Faculty members of the department have excellent academic credentials. Most of them have bright careers and studied in prestigious institutions. They are well motivated and have displayed genuine interest in teaching.
- The department has well established lab facilities meant for B. Tech. program. These are equipped to perform lab work in Physics and Chemistry. To develop communication skills, a language lab has also been initiated.
- Teachers have contributed to corporate life of the university. One senior member has performed as student counsellor. Teachers have also involved themselves in supervision of sports, cultural activities and university events.

Weakness

- Time constraint
- Limitations to conduct the extension programmes

Opportunities

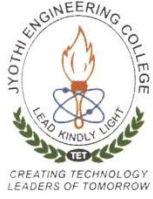
- To design short courses for working professionals
- To conduct cross faculty courses
- To interact with scholars in other institutions.

Challenges

- To sustain the habit of extra reading among the students
- To increase the enrollment of students
- To upgrade the research facilities

Future Plans

- Organizing state and national level seminars sponsored by UGC/ AICTE etc.



Jyothi Engineering College

Jyothi Hills, Panjal Road, Vettikkattiri P O, Cheruthuruthy, Thrissur - 679531
(Approved by AICTE and Affiliated to APJ Abdul Kalam Technological University/University of Calicut)
www.jecc.ac.in E-mail : info@jecc.ac.in

College : 04884 - 259000, 274198
274423, 274878, 274879
Fax : 04884-274777

DECLARATION BY THE HEAD OF THE INSTITUTION


I certify that the data included in this Self-Study Report (SSR) are true to the best of my knowledge.

This SSR is prepared by the institution after internal discussions and no part thereof has been outsourced.

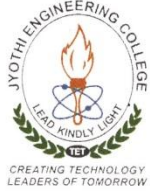
I am aware of that the Peer team will validate the information provided in this SSR during visit.

Place: Cheruthuruthy
Date: 06th November 2015




PRINCIPAL
Dr. K. K. BABU
Principal
Jyothi Engineering College
Cheruthuruthy, Pin - 679531

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Certificate of Compliance

(Affiliated/Constituent/Autonomous Colleges and Recognized Institutions)

This is to certify that **JYOTHI ENGINEERING COLLEGE, CHERUTHURUTHY, THRISSUR, KERALA** (Name of the institution) fulfils all norms

1. Stipulated by the affiliating University: **University of Calicut & APJ Abdul Kalam Technological University**
2. Regulatory Council/Body: **AICTE** and
3. The affiliation and recognition [if applicable] is valid as on date: **For the Academic year 2015-16**

In case the affiliation / recognition is conditional, then a detailed enclosure with regard to compliance of conditions by the institution will be sent.

It is noted that NAAC's accreditation, if granted, shall stand cancelled automatically, once the institution loses its University affiliation or Recognition by the Regulatory Council, as the case may be.

In case the undertaking submitted by the institution is found to be false then the accreditation given by NAAC is liable to be withdrawn. It is also agreeable that the undertaking given to NAAC will be displayed on the college website.

Date: 06th November 2015

Place: Cheruthuruthy


Principal/Head of the Institution

(Name and Signature with Office Seal)

Dr. K. K. BABU
Principal
Jyothi Engineering College
Cheruthuruthy, Pin - 679 531



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